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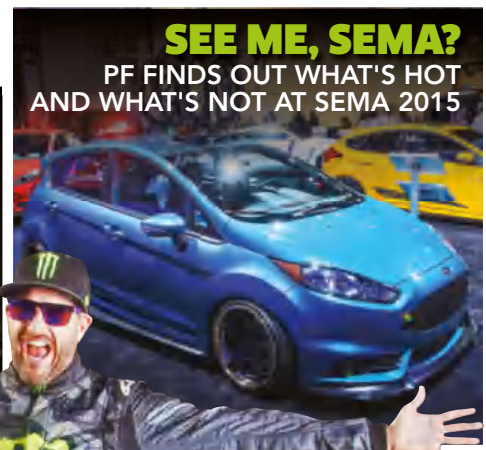
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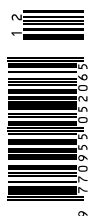
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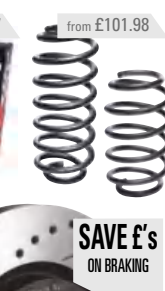
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FIRST WORDS



PERFORMANCE
FORD
DECEMBER 2015 #263

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Yeah, we've got Ken Block on the cover this month, we're a pretty big deal! Actually, this magnificence came care of the tenacious nature of work-maker and spanner-spinner, Jim. He somehow managed to get a 45 min sit down with Kenny of the Block and used the opportunity to ask all the stuff that most other journos have been afraid to. Because Jim is a cuddly love-monkey of a man, Ken was happy to answer, and as such, we have one of the most in-depth interviews ever. Want to know his likes, his outlook, his story, his thoughts on what happened in the WRC? We have it all. Oh, and some pics of his Fords, too!

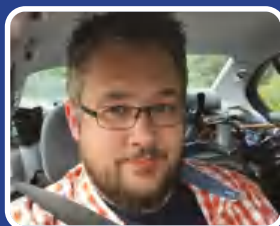
Other than that, we have, in honour of Mr Block, gone with a slightly American theme. As such, there's a Saleen Mustang to whet your whistle along with a full show report from the mind-bogglingly massive SEMA show over in Las Vegas.

Don't get homesick though, there's UK stuff, too. There's a report from our track day at Brands Hatch, we follow the progress of UK racer, Tom Onslow-Cole in the RX Lites championship, there's a guide to buying from auction and lots, lots more.

Now, we've got to get cracking on the Janu... **WHEN THE HELL DID THAT HAPPEN?**

Chris

IF YOU HAD TO DRIVE AN AMERICAN FORD, WHAT WOULD IT BE?



CHRIS POLLITT EDITOR

The Saleen Contour - trust me, Google it. Think of a race-spec Mondeo for the road.



JIM BLACKSTOCK CONTRIBUTOR

'68 fastback Mustang 390GT, Bullitt spec. F**k Eleanor.



JAMES 'DELTA' BALL EDITORIAL WHIZZKID

The Ford Crown Victoria. In police interceptor colours. Or a Galaxie...



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'APPY DAYS

Ford is making it easier for drivers who wish to use social media while on the move, to keep their eyes on the road and hands on the wheel.

The Meople.Connector app, available for iOS and Android devices, will be introduced to Ford's connectivity system SYNC AppLink to enable drivers to use voice-control to listen to messages from social media sites such as Twitter and LinkedIn.

"For many people today, social media is fundamental to staying up-to-date and informed. We are helping to ensure customers can stay seamlessly connected throughout their day in a safe and stress-free way," said Don Butler, executive director, Connected Vehicle and Services, Ford Motor Company.

Further to the Meople.Connector app, Ford announced that they're working with Ministry of Sound, a music streaming service, on another voice controlled app for Ford SYNC with AppLinkat.



PERFECT PARTNER

Michelin are becoming the official tyre supplier for Ford Performance vehicles.

Famous for producing high-performance tyres for the road and circuit, Michelin will provide fitments for the Ford GT, Shelby GT350 and Shelby GT350R Mustang, Fiesta ST, Focus ST and RS, and F-150 Raptor.

Ford and Michelin engineers have developed customised tyres that meet a wide range of performance targets, including; lateral grip; noise, vibration and

harshness; and durability. Each tyre is independently designed and developed in close collaboration on each program to maximize the vehicle's performance envelope.

"We have a long relationship with Michelin, and could not ask for a better teammate to help extract maximum capability from our vehicles," said Dave Pericak, director, Ford Performance.

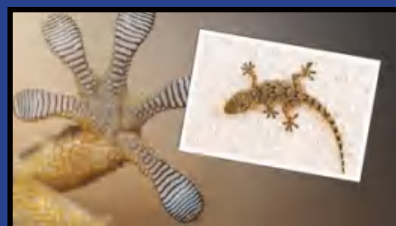
NO LOUNGE LIZARD

Where do a company as big as Ford look when searching to advance their technology? The gecko... where else?

For years, Ford researchers have considered ways to make auto manufacturing more sustainable. A key challenge is that glue used to adhere foams to plastics and metals can make disassembling parts for recycling nearly impossible.

What's special about the gecko? The lizard's toe pads allow it to stick to most surfaces without liquids or surface tension. The reptile can then easily release itself, leaving no residue.

Ford aim to create adhesive innovations inspired by the little lizard. Working alongside Procter & Gamble, both companies will share biomimicry research findings in the search for new business solutions.

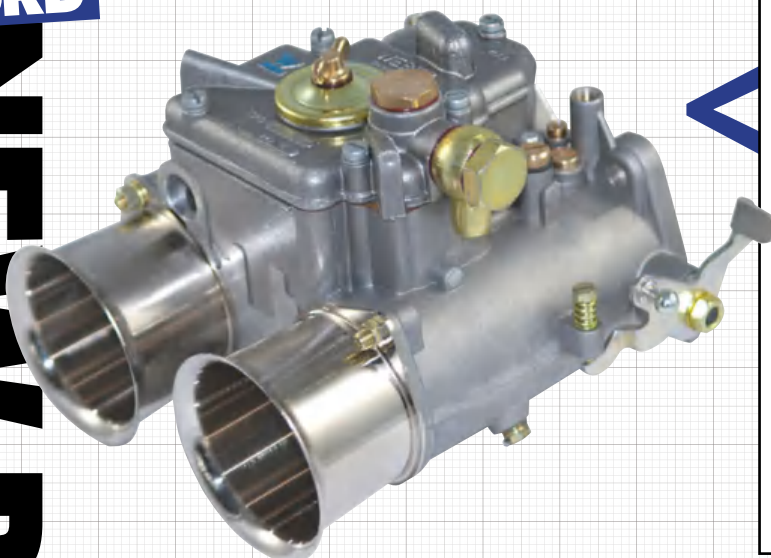


GOTTA HAVE FAITH

The Focus RS has exceeded 1,500 orders from UK buyers without a single test drive being taken!

Clearly there's trust in the Blue Oval. In the month before prices and specifications were announced at September's Frankfurt Show, 500 Focus RS fans had already paid deposits to secure the first cars.

Since then Ford dealers have logged a stream of 1,000 further prospective buyers keen to be amongst the first to take delivery from spring.



WEBCON UNIFIED CARBURETTOR

For years, Weber 55DCO/SP carburettors have only been available as LH and RH units with the outer throttle shaft ends blanked off. This method works well with a conventional distributor ignition system but, as mapped ignition systems have become more widely used, the demand for a throttle position sensor fitment on the 55DCO/SP has grown.

In response to this demand Webcon has developed a new, Unified 55DCO/SP that features throttle shaft at both ends of the carburettor and allows for fitment of a Webcon DCO/SP throttle position sensor kit.

Cost: £499 plus VAT

Contact: www.webcon.co.uk

KENT CAMS FOR FORD BDA ENGINE

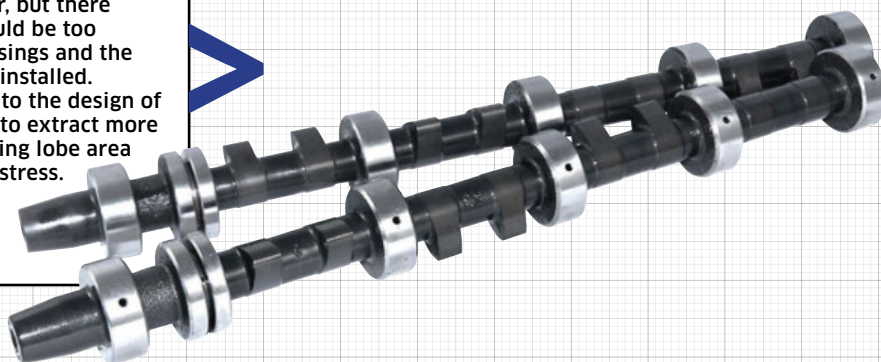
Just when you thought that virtually every modification to the Ford Cosworth BDA race engine possible had been done, Kent Cams has come up with two new profiles.

Most performance camshafts involve increasing the lift by making the lobes bigger, but there comes a point when the lobes would be too big to go through the bearing housings and the camshaft would not be able to be installed.

Kent has taken a new approach to the design of the lobe profile and has managed to extract more power from the engine by increasing lobe area and lift whilst reducing peak cam stress.

Cost: £512.00 per pair plus VAT

Contact: www.kentcams.com



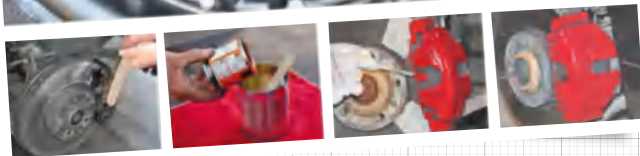
FOLIATEC BRAKE CALIPER PAINT

Brake calipers come in for more than their fair share of abuse, having to cope with high temperatures and damaging brake dust, which is why they tend to show their age quicker than most other automotive parts.

Foliatec brake caliper kits are ideal for protecting and renovating calipers on road, race and classic cars and come in matt black and matt red. Gloss colours are also available and include red, yellow, blue, black, green, orange, white, light blue, lime green, bright blue and purple. Metallic finishes include purple, gold, gunmetal, bronze, aluminium and light silver. A kit is sufficient for four brake calipers and when cured the paint is resistant to chemicals, corrosion, oil and the normal brake heat range.

Cost: £27.99

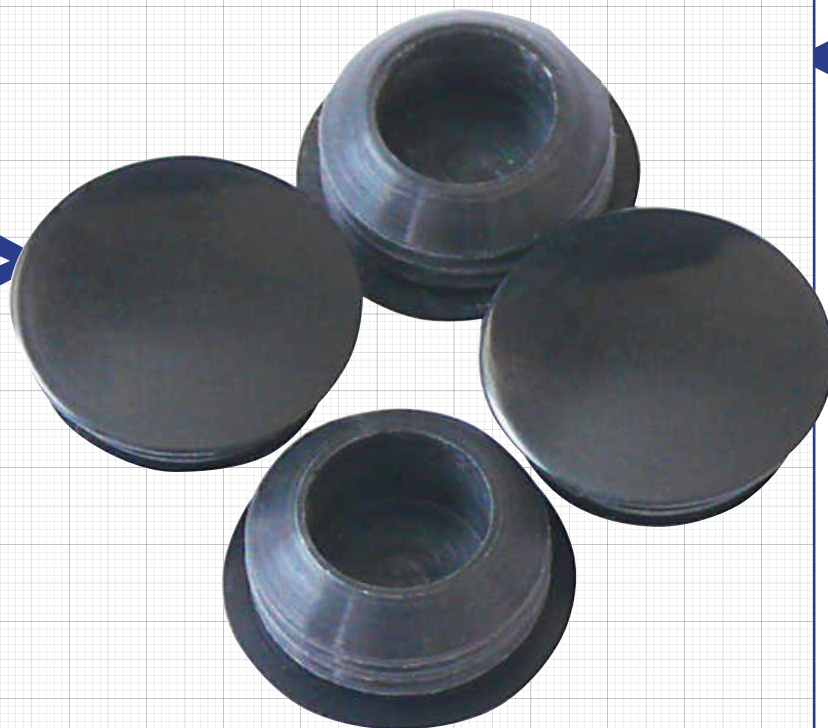
Contact: www.foliatec.co.uk



BURTONS REAR BUMPER BLANKING PLUGS FOR FORD ESCORT MK2 RS2000

Mk2 Escort RS2000 owners will find that it's almost impossible to remove the rear bumper blanking plugs to access the securing screws of the rear bumper extension ends without damaging the plugs. Fortunately Burton Power now supply reproduction blanking plugs to replace them!

Cost: £18.50 per set of four, including VAT
Contact: www.burtonpower.com



B-G RACING MECHANIC'S KNEELING WORK MAT

The B-G Racing Mechanic's Kneeling Work Mat provides a cushioned platform allowing users to sit or kneel comfortably when working on a vehicle. This mat is the perfect companion for a busy mechanic and is equally useful at home, in the professional garage or in the racing pits.

An integrated carry handle allows for easy transportation and positioning and makes it ideal for roadside repairs or on the move. It's pretty sturdy too, made from high quality 30mm thick heavy-duty EVA composition, with a water and impact resistant embossed surface that is easy to wipe clean.

Cost: £11.99 including VAT
Contact: www.bg-racing.co.uk



MOUNTUNE FOCUS ST PERFORMANCE UPGRADE

Ford Focus ST buyers in the UK now have the option of more adrenalin from a new performance upgrade from engine tuners Mountune. This new kit from the popular Mountune range increases the power output of the Ford Focus ST's 2.0 EcoBoost engine from 250 to 275PS and, when fitted by a Ford dealer, does not affect the vehicle warranty.

The Mountune upgrade kit comprises a large capacity alloy intercooler, low-loss cast crossover duct with silicone hose, high-flow dual-entry air filter and specially developed performance-map calibration. Its fitment not only produces a 10 per cent increase in maximum power output at 5,500rpm, but also an improvement in torque from 345Nm to 400Nm at 2,750rpm.

Cost: £1,195 including VAT plus fitting,
(takes two hours)
Contact: www.mountune.com



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WHAT'S ON



20-21 NOVEMBER

RACE OF CHAMPIONS

You may have probably heard of the Race of Champions, but if you haven't, here's the deal: it's an annual event that brings together the world's finest drivers from all the disciplines of competition and sets them free to race on the same track in the same car. Top drivers go head-to-head in a huge stadium where the crowd can see every bit of the action. Honestly, it's great fun, and this year it's in London!

The 2015 event takes place at the Stadium at Queen Elizabeth Olympic Park, which was the home of the 2012 London Olympic and Paralympic Games. Previous Race of Champions have been elsewhere across the world, including Barbados and Thailand, so it's a great chance to see the world's best drivers up close.

Drivers at this year's event include Sebastian Vettel, Tom Kristensen, Petter Solberg, Daniel Ricciardo, David Coulthard, Jason Plato and plenty more world-class racers. For complete schedule and tickets, head to www.raceofchampions.com.



13-15 NOVEMBER

DRIFT WHAT YA BRUNG

Get involved with drifting at Santa Pod's Drift What Ya Brung events and get that Ford sideways! Drift What Ya Brung is perfect for learning or practicing drifting in safe and legal conditions, with over 30 acres of open tarmac.

These are great events to dip your toe in drifting or to sharpen your skills for competition. Santa Pod open beginner, intermediate and advanced tracks on the day - and you're guaranteed plenty of drift time.

Drift What Ya Brung days are limited to 60 people per day to ensure maximum track time, so get your tickets soon! If you don't have your own car, passenger rides are also available too. For more information visit www.santapod.co.uk

AUTOSPORT INTERNATIONAL

Moving into 2016, the first big show to kick off the year is Autosport International. The last event was probably the best Autosport to date, especially with Petter Solberg doing some crazy stunts - we've got good news, he's back!

The two-time FIA World Champion is set to thrill the crowds in the Live Action Arena. We're told that Solberg will be going even bigger and better than last year's stunts! Inside the 5,000-seater arena, often only centimetres from the barriers, Petter will give fans the chance to witness a master class in precision car control and tyre-smoking drifts.

Alongside the usual big-name show fanfare, there are a huge amount of tuning specialists to gawp at. If you need to secure a good deal for some parts, this is a great place to get face to face with the tuners and suppliers. Certainly a highlight of the winter months, we can't wait!



14-17 JANUARY


HOON DO YOU TH




HANK YOU ARE?



PF went to the UK round of the Gymkhana GRiD series to catch up with gymkhana, rally and drift legend and tyre-slayer, Ken Block.

 JIM BLACKSTOCK

 ANDY TIPPING, HOONIGAN RACING INC, MONSTER ENERGY, GOODWOOD AND FORD

Fair to say, I was a bit apprehensive ahead of meeting Ken Block, the man who created and defined an entire genre of motoring and motorsport. Having racked up millions upon millions of views of his world-famous Gymkhana videos, I wasn't sure what to expect.

What I found was a genuine petrolhead, with an easy smile and nature and who couldn't do enough for us in the hour and a half we spent photographing and interviewing him during the last day of competition at Santa Pod.

One of the nicest, most down-to-earth people we have met and PF's newest, biggest hero.

PF: How did the whole Gymkhana concept come about - how did it start?

KB: It started with stage rallying - I was competing in the States and really enjoyed doing it as a privateer. But I wanted more seat time and to learn to do it on tarmac. I grew up in the Group B era, watching Colin McRae sliding around on tarmac and I wanted to learn how to do that, with an AWD car. There's no tarmac rallying in the US championship so I had to find a way to do it separately.

There was a guy in the US who ran a series of events in southern California - Gymkhana US or something. I did a few of those events and really liked it, so I built a very specific car but as soon as the car was done, the organiser quit doing the events.

I was left with this amazing car but nowhere to drive it, so I went back to the location of one of the Gymkhana events - the El Toro air base in Irvine, California - and we filmed a couple of days of testing and practice. I saw the footage a few weeks later and thought "This looks really good - it might be a decent video." We put out that first video - which is called Gymkhana Testing and Practice. It blew up and did way better than we ever imagined. So we kept going ever since, doing one a year.

The great thing for me is that it wasn't a marketing exercise - it genuinely came from a desire to better myself and learn something that I wasn't getting on the gravel.

PF: That first video effectively created the culture of 'Hooning' as we now know it. How do you feel about creating, defining and continuing to redefine that whole genre of motoring and motorsport?

KB: For me, I grew up skateboarding, snowboarding and riding dirt bikes but I never really competed. It was going out with my friends and skating a particular spot or going to Skate Park Utah and spending all day messing around.

When I got into motorsport, I was really disappointed because here was this amazing car - rally cars are incredible, the things you can do with them - but the only time I ever saw it was when I was racing or testing.



In stage rallying [on asphalt], when you're sliding, you're slower than if you're gripping so every time we were working to set a car up for a stage rally, we're looking for maximum grip and the fastest way through the corner. But I wanted to jump bigger or slide faster or have days where all I did was slide around.

So Gymkhana and the videos afforded me the time and the pleasure of being able to go out and do that.

The idea that traditional competition is not the only thing you can do with these vehicles is kind of a new thought. I am pleased that perhaps I have helped with that message and I am very happy that we have been able to expose what we do with the cars to many more people in the world that hadn't seen rallying, rallycross or Gymkhana before.

PF: Of course, you were involved in DC Shoes and then sold the company. Was that to allow you more time to do this?



QUICK FIRE

Sean Connery or Daniel Craig?
Connery

Takeaway food – Chinese or Indian?
Thai

Beer or shots?
I have a bad gluten allergy, so shots

Night-owl or day-walker?
I'm a morning person

Country or western?
Neither

Turbo four or V8?
Turbo four

AWD or RWD?
All

Asphalt or gravel?
Gravel. I love doing what I do on asphalt but I prefer gravel.

Beatles or Elvis?
Beatles

KB: No, actually we sold the company before we started doing this. There's a whole business reason to selling the company – it's very complicated. But motorsport is very expensive and I don't know if I would have been able to do everything I have done without selling DC.

In 2004, Travis Pastrana did some stage rallying and we didn't even know it existed in the States, so him doing that was a really big PR thing for Subaru at the time. It did its job and got people like me interested in rallying.

PF: Is that why you started your motorsport in a Subaru?

KB: Yes, I was friends with Travis and he rode [motocross] for DC at the time, so I said "I'm the Chief Brand Officer here, so what would be better than going out and racing with our biggest athlete?" So I went to a rally school to try it out and ended up being kind of good at it and it went from there. ➤





JOSE MARIO DIA





PF: As an aside, have you tried the Krazy Kart?

KB: Yes, I own a couple of 'em.

PF: So what do you think of the Ken Box videos? [Parody of Gymkhana videos]

KB: I thought they did a really, really good job. When I got involved with all of this, I never thought people would be making parodies of the things I do, so it's funny to see all the spoofs, from little beater cars painted-up to look like mine, to dirt bikes. That one I thought was incredibly well done - the fact that they made the box around it and put the car graphics on it was really cool.

PF: You competed in the FIA World Rally Championship for a while. Would it be fair to say that wasn't as successful as you might have hoped?

KB: I went in with only four years' experience of stage rallying in total before I started doing that. That's really not enough. I think I jumped both feet in but we were hoping to have the budget to run the whole championship for three years - that's really the only way to get up to speed properly.

I did seven rounds in the first year, nine the second and three the third so I never got to do it with full commitment as I never had the budget. I'm grateful for the opportunity my sponsors gave me to go and try it - on my second event out there, I had a sixth-fastest stage time so I had some success as a driver but also, some bad luck and some lack of experience issues. I truly appreciate the time that I got but wish I had been more successful.

PF: Do you think there were unrealistic expectations on you?

KB: That was really unfortunate - I saw comments where people thought I was going to be as fast as [Sebastien] Loeb! That's just ridiculous! I knew what I was doing and the level I was going in at and actually, from our perspective, I did OK - I was almost as fast as Matthew Wilson within the first couple of events. So to be able to go out and do that felt really good but you have to do that series for several years and every event to build up your notes. Without all that, there's just no way.

PF: How do you think your involvement in the WRC affected awareness of rallying in America?

KB: Most Americans didn't even know what a rally car was or what they were capable of and I think that's why, in part, the Gymkhana videos are so popular, because people didn't understand what these cars could do. We just made that a lot more obvious. People ask me all the time; "Why doesn't rally have more success in the States?" On TV, it might have a good response over time. But I don't think you'll ever get Americans to trudge into the forests like Europeans will.

Americans like to sit in a stadium for a couple of hours, drink a beer and have a hot dog, watch an entire event in front of 'em and leave. That's just the way they are.

We have a very good national championship in the States and you see some events where there are 20,000 people for the weekend on the stages. That's nothing compared with some of the WRC events but there is some popularity.

PF: What you described there [American sports spectating] is rallycross effectively, isn't it. You moved from stage rallying into RX - how did that suit what you do and what you enjoy doing?

KB: I really enjoy rallycross. Stage rallying will always be in my heart - what I am, where I come from and eventually, where I will return - but I really do enjoy RX. I grew up >

on dirt bikes and going bar-to-bar over years – I rode for 25 years straight. I only quit a couple of years ago because I didn't want to hurt myself and not be able to drive my rally car!

For me, getting in the RX car – it removes one difficult rallying element that I don't have the necessary experience and that is the notes. I can drive the car quite well and I know how to set it up and enjoy the learning aspect of it all. I think I do better in RX more than WRC because I get in the car and can drive it as quick as, say, Petter Solberg but it was always the lack of experience on the notes that hurt me [in the WRC].

It's been very nice in the last couple of years. I have had a bunch of wins, I lost the [Global Rallycross, GRC] championship last year by five points and led all this year until some bad luck. Last year I was on the podium with Petter in the WRX [FIA World Rallycross Championship] so I'm looking forward to many more years of that.

PF: A few years ago, Derek [Dauncey, Ken's Manager and ex-Mitsubishi WRT manager] was quoted as saying, for young drivers, if you have money for eight rallies, do six and spend the rest on promotion. Would you agree with that?

KB: It all depends on someone's goals. Experience is a huge factor in stage rallying but if someone has the experience and is looking to get their name out there to attract sponsors, that's where that statement makes sense. The development of a name and generating exposure is what attracts sponsors.

When I started in Rally America, they didn't even have a TV program. So the only way to get exposure was to make it ourselves to prove to sponsors that they would get something from being part of my program.

Nowadays, young drivers come to me and ask "What can I do?" I tell them to read a business book and understand what these companies want and what a marketing dollar means. If you can't understand that, you can't even talk to them.

PF: You have become increasingly involved with Ford, as a company and a brand. How did that come about?

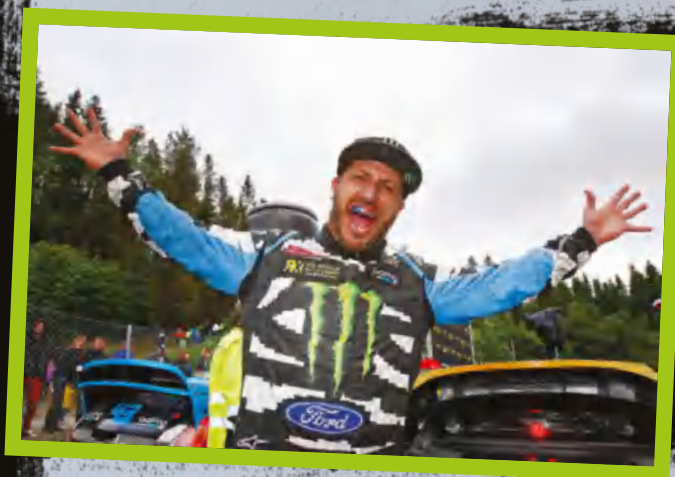
KB: When I started working with Ford, one of the things was they made incredible cars for every discipline that I wanted to race in. Stage rallying and rallycross – they have two of the top cars in the field and adapting that for Gymkhana has been amazing. So not only did they have the right equipment for me, they were still competing at the top level – in the WRC. It was a perfect fit at that time and since then [2010] I have had a great partnership with them.

PF: How did it feel to be involved in the development of the Focus RS, the first road-going, performance-inspired 4WD car since the Escort Cosworth?

KB: It was really amazing. I had been pushing them for years to do the AWD thing and it was a dream come true to get the call saying they wanted me to come out and do some testing and development. I couldn't be happier and the car itself is really good.

PF: What's in your garage?

KB: I drive a Ford Raptor – it's a Ford F150 truck that had been prepared for off-roading. It comes from the factory widened, with off-road suspension and nice trim levels. I live in the mountains and in the winter, it's a great AWD vehicle to move stuff around; in the summer, I can take it down to the desert, take my dirt bikes, go jumping – whatever. My wife drives a Ford Flex – AWD, six-cylinder, twin-turbo minivan. ➤





PF: Money no object, what would you buy tomorrow?

KB: Car-wise, the RS200 is by far my favourite. I would love to have a few – a daily driver, a gravel rally car, one I can add loads more power to and drive on tarmac and slide around, an IMSA widebody one... The problem is there are only so many and they are very expensive. I actually own one that I am in the process with. You'll see that in a year or so.

PF: If you weren't doing this, what would you be doing?

KB: I'm very lucky to have an amazing career racing cars and still have one doing company development – Hoonigan is my brand and I help with the marketing with that and some other partner brands, like Monster and Ford.

PF: What would you do in your time off, if you had any?

KB: I have three kids, so I'd like to spend more time with them, doing the things we love like snowboarding, riding mountain and dirt bikes, spending time in the desert, that kind of thing.

PF: What does your wife think about it all?

KB: To give you some perspective on that, my wife has competed in seven rallies. Her last one was this year's New England Forest Rally in an R2 car. She does quite well.

PF: How will you explain it all to your grandchildren?

KB: Wow... Again, it's about having fun with cars. There is a competition side but also a fun side.

PF: Who would you most like to have in the passenger seat with you?

KB: [Draws breath] Wow... I... I guess my wife...

PF: Whose passenger seat would you most like to be in?

KB: [Instantly] Colin McRae's.

PF: How many baseball caps do you own?

KB: Way too many.

See what I mean? Ken has to be one of the nicest fellas in the world of motorsport, and that's just fine with us. He's living the dream, he's trying new things and all the while, he's having fun, all behind the wheel of a Blue Oval.

As Taylor Swift sang, haters gonna hate. But hey, let'em, we say. Ken's not trying to be anything other than Ken. He doesn't have to film it, nor is he held at gunpoint to make bad-ass videos every time he does. He just likes to share the fun he's having, and the motoring world is all the better for it! 📺



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BRAND POWER

It all looked bleak early one foggy November morning, but as soon as the murk cleared off the engines roared and Brands Hatch came alive. Got to love a PF track day!

CHRIS POLLITT GARY HAWKINS

Bloody Mother Nature, thinks she can rock up and spoil our fun. We say NO, MADAM, YOU WILL NOT. Not when there's a track booked and a line of pit garages filled to the brim will all kinds of powerful Fords. Oh yeah, it was a blinder of a turnout, the only problem was that we couldn't get on the bloody track until the dense autumn fog did one.

Thankfully, by 11.30am we were given the all-clear, at which point a mass of

cars filled the pit lane in readiness for some track action. The track was damp initially, which gave some of the RWD boys plenty to think about, whilst at the same time they put on a bit of a show for the spectators – never a bad thing. Luckily though, the sun soon punched through and as such, plenty of grip was to be found on the Indy loop of Brands Hatch, so everyone could push that little bit harder.

Now, this is where we have to go all parental, so sorry about this. You see, >







in the midst of all the fun and frolics, people started to get a bit carried away. At one point there were five red flags in the hour, forcing the marshals to invoke a sin-bin policy. Guys, we've been doing track days for a long time and this has never happened. Why pay your money only to hamper your own day? It makes no sense. We're all just out to have some fun, not actually race.

Grown-up moan aside, the day was a massive success. Every car, bar two Beemers, was a Ford and the atmosphere was off the charts. Add into this the mix of motors – everything from Escorts on carbs through to Sierras with turbos big enough to live in – and you've got one brilliant day on your hands. For us, the cleanest car had to be the J-WRC kitted Fiesta that was getting just as much attention in the pits as it was out on track, but that's what a killer build and Cosworth power will do! Another that had jaws on the floor was the blue Escort van. Yes, a van. If you were there, you'll know why; if not, let us just say it was running a custom chassis, Cosworth kit and, er, oh yeah, a 718bhp Supra engine with a turbo bigger than a Micra – bonkers, but absolutely brilliant.

Sponsors of the event, AirTec, once again showed a brilliant range of cars, too. From the Fiesta racer to the mad Focus RS, they had it covered. It's great to see a company not only getting involved, but also putting their money where their mouth is and giving their own products a proper kicking.

Then, of course, there was our Puma. Once again, it was far from being anywhere near one of the most powerful cars there but that doesn't matter. The setup we've employed sees to it that it's fun from bumper-to-bumper and this track outing confirmed that was still the case. After all, these track days are about having fun, not going into the wall backwards at 70mph – that's what the M25 is for.

All in all, it was another cracking day out with belting attendance and an even better atmosphere. As we type, we're working out the dates for next year, but when we have you'll be the first to know. We'll see you there, yeah? ☐



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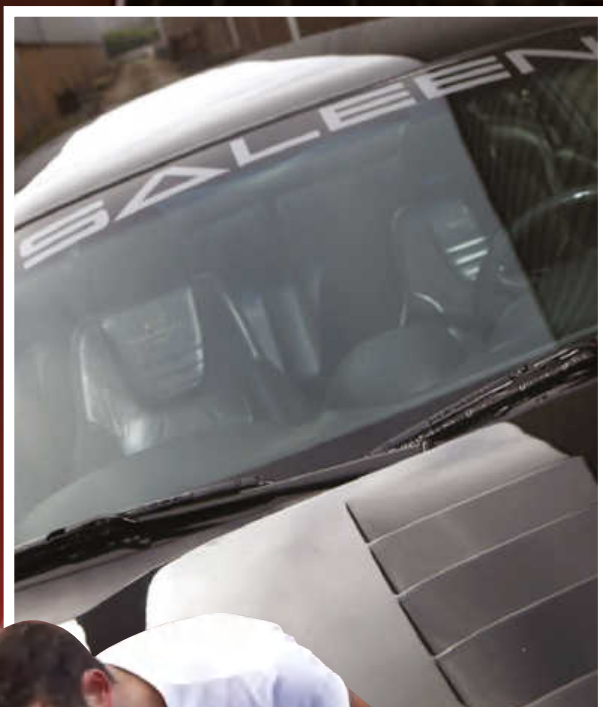
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 CHRIS POLLIT  GARY HAWKINS


W

When we were 21 we bought, er, beer mainly. Anthony Driscoll, however, decided against the bubbly mind-number and bought a car - nothing special in that, admittedly. That is until you discover said car was a Saleen Mustang. We had a Nissan Sunny Estate that our mum gave us. No, really.

Anyway, this isn't the time to lament the vehicular choices inherited from our parents. It's the time to look, jaw on floor, at the Mustang you see before you. It's black, it's home to a monstrous V8, a stonking great supercharger and, of course, a handy dose of air suspension, FOR THE LOWS, as the kids say.

“IF HE WAS GOING TO HAVE A SALEEN IT WAS GOING TO BE IN A CONDITION BEFITTING OF ITS EXCLUSIVE STATUS”



Of course, there's actually a lot more to the story than the looks. This car has been the basis of a journey for Anthony, one that has seen the car constantly evolve and improve. So, if you're sitting comfortably, we'll begin with the story of that journey.

Ant bought the car back in the year 2010, around the time the car was a decade old. You'd think that good old build number 801 would have had a life of being cherished and pampered, what with being such a rare and sought after car – even on UK soil. Sadly though, that wasn't the case, as was demonstrated by a selection of gaudy modifications, both store-bought and home fabricated – eesh.

This was never going to cut the mustard with Ant – if he was going to have a Saleen it was going to be in a condition befitting of its exclusive status – and as such, all the home-made and store bought crap came off and promptly went in the bin, and rightly so. In its place came a whole host of goodies from the States, goodies that brought the car back to factory condition – lovely.

Now this would normally mean happy days, but that wasn't the case – after a mere three months of ownership the 'Stang spun a shell, rendering it as nothing more than

a big, black, driveway ornament. It takes more than that to stop Ant though; in fact, rather than be dejected and upset, he saw this is a grand opportunity to learn some new skills whilst acquiring more power.

Using the exchange rate to his advantage, Ant bought some new internals made by the brilliantly named Manley, care of Cushman Motorsports. He bought an engine building book, too, and jumped on the spanners. Focusing on the bottom end, Ant retained the original Saleen heads and series one supercharger, figuring it would be best to learn how to walk rather than attempt a full sprint in the form of a top-to-bottom engine rebuild. ➤





It took, on and off, around a year of Ant's spare time and methodical spannering to get the car running again. As testament to his considered rather than gung-ho approach, the Saleen happily barked into life once more, allowing Ant to enjoy his slice of American muscle.

Now, just because the car was running again, don't think for one second that Ant stopped with the mods. Whilst he'd removed all the tack and gaud that the previous owner had fitted, Ant hadn't gone all out with replacement parts. Now the car was behaving, it was time to treat it. As such, OEM Saleen rear pillars were installed, an 'open mouth' Mach 1 grille was fitted, chrome Saleen five-spoke rims were bolted on along with a genuine Saleen rear spoiler and finally, to top it all off, a super rare Cobra R bonnet was fitted, too. Though the latter mod was part of a master plan – Ant was going to need more vertical space in that engine bay!

It was 2012 when the spanners came out again, but this time Ant was feeling more determined than ever. Plus, he was hankering after more power, a craving for which he had a rather tasty solution. Would it be nitrous? Nope. How about a turbo? Nah, mate. What about a Kenne Belle 2.6H twin-screw supercharger? Awwwww yes!

The thing is, just bolting that on would have been something of a fruitless endeavour owing to the fact it wouldn't have been able to gel with the rest of the engine. Ant had thought of that, though, hence ordering a pair of Fox Lake stage 2 cylinder heads to enable better fuelling and breathing, along with a set of stage 2 blower cams from Crower. ➤

“NOW, JUST BECAUSE THE CAR WAS RUNNING AGAIN, DON'T THINK FOR ONE SECOND THAT ANT STOPPED WITH THE MODS”





With all that fitted by Ant's own hands, the Saleen was rapidly becoming a monster. However, the tuning wasn't done yet – the fuel system would need an overhaul before the engine was turned. This was sorted via an aggressive-sounding Terminator baffled and sumped tank complete with Ford GT pumps and Terminator fuel hat. Oh, and some 60lb Siemens injectors for the engine, too.

The only thing left to do before Ant did some damage to his rear tyres was to tell the Saleen's electronic brain just what the hell was going on. As you can imagine, it's not the sort of car you can just roll up to any tuning shop and have them play with, especially with the setup under the bonnet. Thankfully though, one man, Kevin at Wicked Motorsports, was more than up for the challenge, despite there being an ocean in the way! Ant hooked up his laptop to the car, Kevin tapped in via the internet and a few keystrokes later, the Saleen was running healthily. God bless technology, eh?

So, what's the result of all that hard work? Well, the car hasn't seen the dyno yet, but estimates are coming in at over 600bhp to the rear rubber – poor tyres. Not bad considering it was a meagre 345bhp when Ant picked it up all those years ago!

To reward its compliance in the engine-tweaking department, Ant has treated it to some other bits, too. First, there are the Brembo stoppers – this is a big old beast after

all. Then there's the fun stuff, namely the air ride and custom GAZ adjustable shocks, all fitted by Ant of course – talented git. The GAZ clobber is there for the whole shot, whilst the air keeps things comfy and smooth. Though it's not for posing – the air can stiffen up at the push of button, offering a set up to rival springs any day of the week.

Now complete, Ant plans to enjoy the fruits of his long-term labour, and rightly so. We know the Mustang isn't for everyone, and that baffles us to be honest. Here we have a car that's dripping with power, it looks so mean it could make toddlers cry and, best of all, it has the beautiful V8 rumble mated with the frantic yet purposeful whine of the twin-screw supercharger. Basically, if you want a true performance Ford, irrespective of origin, this monster is it! 🏁



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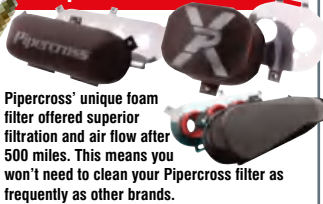
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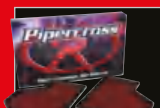
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LITE ENTERTAINMENT

2015 GT3 endurance champ Tom Onslow-Cole recently took a day off from racing his Mercedes SLS and tried something far more familiar to mere mortals like us. Well, at least on the surface anyway. Trying his hand in the Ford-fuelled world of RX Lites, Tom made quite the splash on his debut – and we sent Paul Cowland to find out what went on...

 PAUL COWLAND  RX LITES

In the old days, racing greats like Sir Stirling Moss used to drive all sorts of mechanical steeds, all of the time. Toast, jam and tea for breakfast, an F1 race before elevenses, a saloon joust after lunch, and then, if your name was John Surtees, probably a motorcycle Grand Prix before tea and crumpets in the afternoon. These days, most drivers just don't have the bandwidth or opportunity to step outside of their chosen formulae, but that isn't to say that a talented and fortunate few still don't. Ex BTCC ace and current GT3 champ Tom Onslow-Cole, or TOC as he is often known, is one such guy.

A racer's racer, TOC will have a go in anything competitive. Despite his usual motor being either an Aston Martin Vantage GT3 racer – or the aforementioned Mercedes, TOC's happy to get down and dirty in pretty much any racecar. I've even seen him happy to rub shoulders in shoestring club races just for the giggle. In an age of media-driven, brand focussed drivers, Tom's just a good old-fashioned racer. That's not to say he doesn't know how to turn it on for the sponsors, of course...

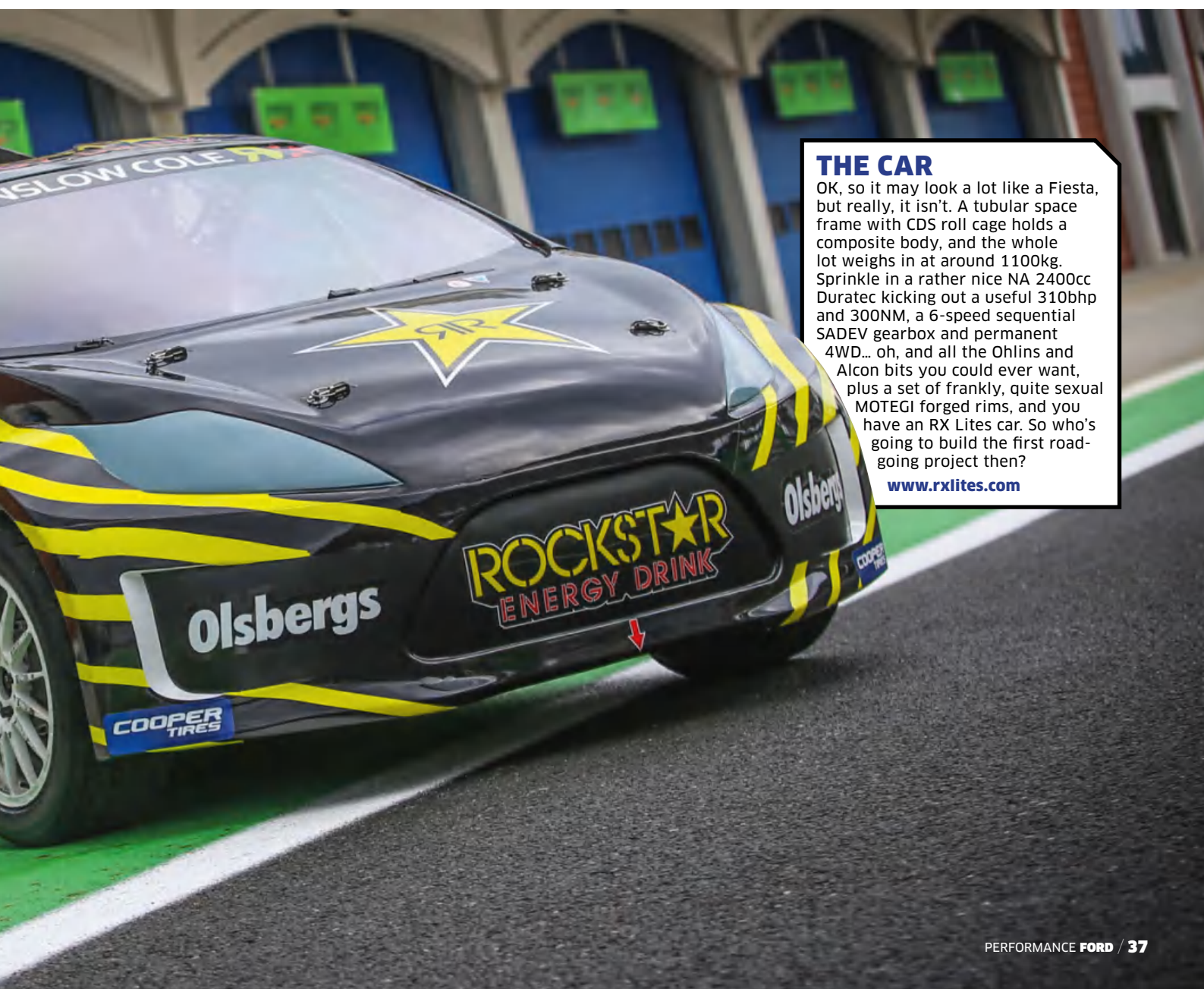
With that in mind, it didn't surprise many when TOC was shortlisted for the MSA's RX Lites Rally Cross competition. Held by the sport's governing body, the idea was to invite the great and the good from other formulae and genres and let them battle to find the best rally newcomer. Fighting it out in these superb little Fiesta look-alikes would be 12 hotshots, whittled down from 150 shortlisted hopefuls. To cut a very long story short, TOC beat them all in a blistering display of pedalling at a hard-fought session at Lydden Hill, winning himself a fully supported team drive at the next RX round in Turkey by way of a reward. "I was so pleased to win this," he explained. "Rallycross is such a fast-growing sport – and so very cool to watch. I've been wanting to give it a try for ages."

And so it was to be, getting thrown straight in at the deep end, we fast-forward a few weeks to find TOC in Turkey, with leading 3-car team Olsbergs MSE and partnering last year's champ Kevin Eriksson. "This was good and bad news," laughed Tom. "It was fantastic to be with such a friendly and professional team, and it was wonderful to know that I was in a championship-winning car, but when everything is perfect like that, you have to look to yourself to make the difference." That's quite a call for a rookie to the sport. Tom may have shelves full of trophies, but as he himself was quick to admit, "There would be an awful lot of learning to do before the weekend was out." >



"Rallycross is such a fast-growing sport – and so very cool to watch"





THE CAR

OK, so it may look a lot like a Fiesta, but really, it isn't. A tubular space frame with CDS roll cage holds a composite body, and the whole lot weighs in at around 1100kg. Sprinkle in a rather nice NA 2400cc Duratec kicking out a useful 310bhp and 300NM, a 6-speed sequential SADEV gearbox and permanent 4WD... oh, and all the Ohlins and Alcon bits you could ever want, plus a set of frankly, quite sexual MOTEGI forged rims, and you have an RX Lites car. So who's going to build the first road-going project then?

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Unable to get any practice sessions in before the race, TOC's strategy would be to watch videos of the circuit from the previous year's event and commit it all to memory – the best lines, the overtaking spots and braking zones. "I arrived in Turkey with a huge list of questions," he smiled "But thankfully, the team were amazing, and took me through them all. They were just fantastic at settling me in, and that meant I was confident about tackling practice." Confident he may have been, but with time only to complete four lots of 4 lap sessions, it came as little surprise to see TOC a little off the pace at the start, not helped by an "ego-bruising spin" on one of the tarmac sessions. "The RX Lites cars are so alien to a circuit driver," he explained. "They're just so softly sprung, and move around so much, it's a case of re-educating yourself as to how to transfer the weight to get it to do what you want. It definitely took a lap or three to really get the feel of the car. When I did though, it was fantastic!"

With times tumbling fast, TOC entered the heats. Following the faster cars, and tracing their lines, he was quickly in the fray – and worrying many of the regulars! The RX Lites heats system works on overall times; you might win your heat, against five other cars, but if drivers in another group run faster, you may not have been quick enough overall. Luckily for TOC, his new-found pace netted him a succession of top-three finishes in each race, meaning that as the sun set on the end of the first day, he was in an impressive 3rd spot overall – much to the jubilation of his new team-mates. "I think that pace came simply from keeping my nose clean, and being clean and consistent," he beamed over a cold one back at



the hotel. "I found myself making up time by late braking on the tarmac sections, where the rally boys perhaps try to scrub more speed off. I'm also learning about the attitude of the car in all conditions, and it's really starting to come together now."

After reviewing his first day videos throughout the night, day 2 would see TOC come out of the traps like a rabbit. Rallycross uses a 'joker' lap system, which allows drivers to choose one longer lap in each race. Every driver has to do it, but when you do it can make a real difference to the outcome. Working with a spotter in the pits, drivers make a

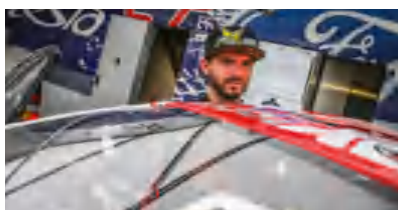
"I'm so happy to have achieved such a great result at my first ever event"



TIME TO RACE

In a sport that measured success and failure in thousandths of a second, it's unsurprising to see Tom acting as ambassador for the clever, yet attainable range of Casio Edifice Chronographs. Tom's latest timepiece is the ingenious EQB-510, which links to your Bluetooth smart phone and does all manner of clever things, including adjust the time as you step off the plane, logs your lap times and even allows you to find your phone when you've lost it after the post-victory party. Perfect for a Rockstar racer, really!

www.edifice-watches.co.uk
www.tomonslowcole.com



lunge out of the pack, cover the extra distance and then dive back in. It makes for real last-lap drama, that's for sure!

TOC managed to make life a little harder for himself in the 4th heat by inadvertently jump-starting. RX start lights run differently to circuit lights, and a lightning-fast throttle prod as the red lights extinguished saw TOC effectively jump-starting. And the penalty for such a crime in Rallycross? Yep, you've guessed it! DOUBLE joker laps! Despite this, TOC drove like a seasoned pro, did both of his Jokers... and then by sheer talent and speed... WON! Safe to say, the team was ecstatic, and the crowd was impressed. "That really gave me a confidence boost for the semi-finals," Tom intimated as he got into the car.

The longer, 6-lap semi and final went almost in Hollywood script fashion from that point on. Driving superbly, and

clearly having taken on everything he had learned throughout the weekend, TOC was flinging his Rockstar liveried car around like he'd been doing it his whole life. The result was a 2nd finish in the semi, then after a clinically perfect drive from lights to flag, a triumphant 3rd in the final! He'd done it... he'd got a podium on his very first attempt! "I'm so happy to have achieved such a great result at my first ever event," smiled Tom as he seemingly high-fived the entire pitcrew. "RX Lites is such a great feeder series, and although I'm still looking at GT and endurance racing next year, I'd really like to do this again. I'd really like to thank the team at Olsbergs MSE for their support, the MSA and IMG Sports, plus my sponsors, Rockstar, Casio and Milltek for supporting me through it all."

Seems like real racing drivers are still very much with us, after all.... ☺

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LOTS TO SEMA

The SEMA show in Las Vegas is one of the biggest on the global motoring calendar, and with a heavy Ford flavour it would have been wrong for PF not to check it out.

CHRIS POLLITT FLY

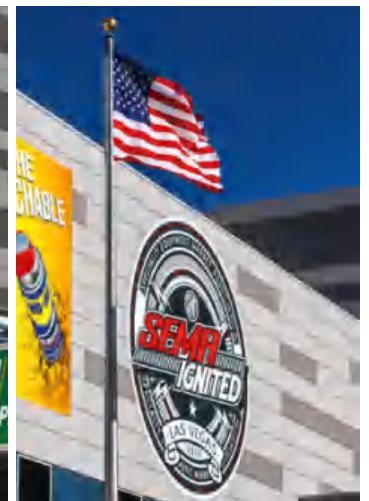
The SEMA (Specialty Equipment Market Association) show in Las Vegas is more than just 'a show'; it's very much 'the show' for tuners and aftermarket parts suppliers not just stateside, but also globally. Not only that, it also attracts the toolmakers, the developers and the industry behind the aftermarket world – basically, it's a pretty big deal.

The 2015 outing for SEMA was, as you'd

expect, quite the event and, luckily for us, it was chock-full of amazing Ford content, and surprisingly it wasn't all Mustangs either. The Focus and the Fiesta are rapidly becoming popular in the States, something many of the stands were keen to capitalise on.

Ford also took home a number of the show's coveted awards, too. For example, the award for Hottest Car of 2015 went to the Mustang. Hottest 4x4, that'll be the >









Ford F Series. As for the Hottest Sport Compact, or, er, car as we call them, the award went to the Ford Focus. Proof, not that it was needed, that Ford is still very much on top when it comes to the fans.

If you've ever been to a show at the NEC in Birmingham, you'll know that motoring events are a big deal. Well, if you think your feet hurt after a day in Brum, be glad we've done the hard work at SEMA for you! This show could swallow the NEC several times over - it is massive!

Everything was there, from wheels to body styling to engines to suspension and much, much more. The stands had no limits either, with cars - including the new Ford GT - suspended at all kinds of crazy angles. Every tuner and stand was trying to outdo the next, which made for a cracking experience from a visitor's point of view.

Obviously being an American show, and owing to the fact the car is still a very new, very hot topic, the Mustang was very much the star attraction for many. This is no bad thing though, as we saw an incredible cross-section of just what can be done to this car. From simple changes such as wheels and a new paint job, to full on transformations with split-rim alloys that'd cost more than your house, hiding under massive arch extensions - the range this car has in terms of looks is something else. Though we have to admit, the schoolboy within loved the police-spec drag Mustang - just about the only car we want to get pulled over by!

Interestingly, whilst there was a mass of Mustangs present, they weren't all boasting the 5.0 V8 that we here in England seem to be getting all excited about. In fact, the 2.3 EcoBoost version was incredibly popular, with the American tuners keen to show what they could extract from the 'little' four-banger. That's fine by us, as it means we'll have more upgrades to choose from when the Stang finally comes to the UK. >



More familiar faces, as mentioned, included the Fiesta and the Focus. Considering these cars were designed with Europe in mind, it's remarkable how well the US scene has taken to them. And we're not talking about simple visual tweaks here, we saw everything from full-on rally Fiestas through to Foci (is that the plural?) that would make a BTCC version blush – and they were road-going cars, mind.

We have to wonder, has the popularity of this month's cover star, Mr Block, and his love for the Fiesta done anything to spark the interest? It's a possibility, and as he was at SEMA (two days after we did the cover shoot at Santa Pod – busy guy) we're sure a few more orders were placed. After all, if seeing him kick a Fiesta around like a lunatic doesn't make you want to buy one, nothing will.

As you can see, there was no shortage of visual treats for the keen Ford fan, so we'll let the pictures do the talking now. Trust us though, if you make the effort to go to SEMA 2016 it'll be well worth the gamble. Get it? Because it's in Vegas? We'll get our coat. ☺





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PERFORMANCE **FORD** **ICONS:** FIESTA ST

This month PF has a go in the Fiesta that reignited the love of the model for both drivers and tuners alike, yet you can now get this pocket rocket for pocket money!

 CHRIS POLLITT  BRUCE HOLDER

If there is one thing that Ford of Europe are known for, it's the ability knock out a belting hot hatch. It all started with the XR2, then the XR2i, which evolved into the Fiesta RS1800i and the rare-as-you-like Fiesta RS Turbo. All were damn good fun, none of them offended the wallet and they all offered a drive that was far more fun than anything else on the market at the time. A great success generally speaking, until they stopped.

When the XR name left the Fiesta in the early '90s, there was nothing to replace it. A heavily revised version of the Fiesta came out, and while it seemed familiar, it wasn't something that Ford was willing to make sporty. Yes, the Zetec S happened, but in reality that was an exercise in the marketing of sporty aesthetics in a bid to satisfy the speed-demanding market. While the chassis was still tight, the 1.6 engine was hardly a pacesetter in standard guise.

With the promise of a new Fiesta hitting the roads in 2001, fans of the model became excited. They'd seen the Focus ST170, the Mondeo ST and so on, so the anticipation was high. What would the new Fiesta bring to the table? Naff all, that's what. Available with either a 1.3 8 valve or 1.6 16 valve petrol, the new Fiesta didn't boast any excitement at all. Add into the mix the fact Ford had no initial intention to offer it in 3-door guise and you were left with a bit of a dead duck. Ford, however, had something up its sleeve...





BEGINNINGS

The birth of the new, 2001, Fiesta was a confusing time. Available with only two petrol engines and only as a five-door, it wasn't the hottest car on the lot. Yes, it was a massive departure from the Fez of old, but that didn't make it any more exciting. Then there's the fact it was available in metallic beige, urgh. Our Ed worked for Ford at the time, and he admits he was stunned by how underwhelming it was.

Then there was the fact Ford still had car parks and car parks FULL of the old Fiesta. They ended up being heavily reduced, fitted with bodykits and, for the most part, being sold as the Zetec S. We have nothing against the Zetec S, we just can't ignore the fact it was an afterthought.

Ford fans were, as you can imagine, a little baffled.

They remained baffled for a few years, until 2004 in fact, when BOOM! The Geneva Motor Show played host to this, the Fiesta ST.

Okay, so it wasn't a complete surprise, Ford had hinted at what it was going to do. But still, it was a relief to see it in the metal, you know, to be in a position where you could believe it was going to be a reality.

A reality it soon became, and the showrooms were the first to know! Orders flooded in for the ST. The looks were right, the stripes drove people wild, the spec was the highest it had ever been on a Fiesta and the 2.0 Duratec engine with near-as-dammit 150bhp on tap was a blinder. Oh, and it was a three-door, too.

The motoring press liked it, too. Comments based around the power, the impressive amount of torque for a small car and the tight chassis, ensuring crisp, direct handling were commonplace in the motoring rags. It was a massive success, proving that in terms of peppy Fiestas at least, absence apparently does make the heart grow stronger. ➤



LEGACY

Over the last decade-and-a-bit the Fiesta ST has developed a massive following. From the casual driver who wants their daily car to be a bit more fun, to the track day hero, through to rally drivers, entire race championships and more, the ST is a firm favourite. Tuners flocked to it as well, seeing the robust 2.0 Duratec as the perfect base from which to extract more power. Jamsport, for example, not only raced the ST, it also made a name for itself converting them to Forced induction via the addition of a supercharger.

It wasn't just the independent tuners, though. Ford supremos, Mountune, got on board too. The company offered a dealer-fit conversion that increased power, torque and handling, and because it was dealer-fit, it didn't hurt the all-important warranty.

As the years rolled on, the ST remained massively popular with a dedicated following, both in terms of tuners and owners. Even now, it's still a car that's thought of fondly and cherished by many. It was the perfect way for the Fiesta to come back to hot-hatch table. It was built to suit its time and even the years ahead, it was a thought-out, considered car from Ford, which showed the company cared about its speed-loving demographic. Crucially though, the fact it was so 'right' cemented the future for the Fiesta STs of today, which are built on the foundations and needs met so perfectly by the original. That's a hell of an accolade.



PF DRIVES

The one we got our hands on was a sexy little number. Blue in colour with tasty black leather, it felt far more luxurious than any other Fiesta we'd previously experienced. One turn of the key and the deep grumble of the 2.0 Duratec quickly served to remind us that while it could – in a different mechanical guise – be Nan's runabout, the ST is anything but.

Despite the big engine and the sporty aspirations, the ST is a surprisingly tame beast. It's not the metal equivalent of a Jack Russel tugging at its lead, it's more relaxed than that. It bumbles along quite happily at slow speeds, all while being comfortable too. Even on Dagenham's hideous tarmac, the stiff ST wasn't cracking our spine.

Anyway, enough of the slow stuff, time to introduce pedal to carpet. The power, thanks to being from a naturally aspirated source, is there in an instant. Though it's the torque you notice first, as there's just so much of





it. In reality there's only 140lbft or so, but in a car as big as a Zippo, that makes a difference.

The gearbox is tight and direct, though the throw is a little long, but it's not of too much detriment. The seats hold you in place and the steering wheel almost seems to be able to sense what you're going to do, it's so sharp and willing to change heading.

On the bends it's playful without being terrifying. Yes, some heavy footmanship will induce the back end to try and come around, but you really have to work for it. The suspension, while by no means revolutionary, is more than capable of keeping the ST where you want it. It does it without nannying you though, you never feel like the car is holding you back. Basically, it's just a ridiculous amount of fun. Obviously it's nowhere near the level of the new Fiesta ST, but trust us, a proper drive in the original shows you where the current car's greatness stems from. 📍

TECH SPEC (ORIGINAL CAR)

Engine: 1,999cc Duratec, four cylinder transverse mounted, two belt-driven overhead cams, 16 valves, aluminium head and block, fuel injection, Siemens engine management, five bearing crankshaft, 147.5bhp @ 6,000rpm with 140lbft @ 4,500rpm

Transmission: FWD, hydraulic diaphragm spring sdp clutch, five-speed synchro, 3.82:1 final drive

Suspension: IFS by MacPherson struts, offset coil spring, lower arms on subframe, rear torsion beam axle, telescopic dampers, anti-roll bar.

Brakes: Hydraulic vacuum servo split dual-circuit, 258mm discs, ABS

Wheels & Tyres: 17 x 6.5 11 spoke alloys with 205/40 tyres

Exterior: ST styling pack consisting of front and rear bumpers, front fog lights, side skirts and optional twin body stripes

Interior: Sport seats with ST badging, sports gear knob and pedals, CD player.





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HOW TO



Fit an intercooler

An intercooler is a must for a turbo car. If you're going for more power though, an upgrade is an absolute must. As such, PF looks at what's involved.

CHRIS POLLITT AUTOSPECIALISTS

A happy turbo is a turbo that has at its disposal all the ancillaries and parts it needs to operate well within its parameters. If one small element of the turbo's circulatory system is overlooked, it can cause issues – big, expensive issues. One such element is the intercooler.

Its primary function is to chill the air being fed into the turbo; this keeps things cool, keeps the power constant and ensures that the turbo itself isn't being subjected to extremes of heat, extremes that could stress the turbo.

Thankfully, the manufacturer has your back covered on this one – they fit intercoolers to the car before it leaves the factory. Incredibly helpful of them, that is. However, these intercoolers are built to a specification, and that's to meet the needs of the car's standard power output. Ergo, if you up the power of your car in any way – especially if that increase comes from a new turbo – you're going to need to upgrade the

intercooler. Cool is good, so it never hurts to have plenty of air on tap that's come from a chilled source!

Thankfully, there are plenty of companies out there who can sort you out with a new intercooler. At the forefront of suitable offerings for Fords is, without a doubt, AirTec. With years of experience in the field, they know a thing or two about keeping engines and turbos cool, and as such, they offer a wide range of radiators and intercoolers.

After a quick call, the team was fairly insistent that we could fit one ourselves, despite us being considered something of a mechanical recluse. Still, we're always up for a challenge, so we had a go at fitting one to our project Mondeo ST TDCi. Annoyingly though, the old girl put up a fight due to unforeseen issues with the car (NOT the intercooler) so it was a bit of a battle. As such, we've put together this guide on how to fit an intercooler to the Mk7 EcoBoost Fiesta – this one didn't skin our knuckles! ➤

Costs

Varies per car, but for our Mondeo it was £280

TIME TAKEN

2 hours

DIFFICULTY

2/5

TOOLS

Torx drivers
Flathead screwdriver
Phillips screwdriver
10mm and 13mm socket/spanners

THANKS

AirTec
www.airtec-cooling.co.uk



STEP 1

First things first, you'll need to get access to the standard intercooler. To do this, undo the two T30 torx bolts and the four plastic screws (all visible on the slam panel), go easy with the plastic screws though, as they'll easily shred.

STEP 2

Next, undo the two T30 torx bolts on each headlight. This will allow you to remove the headlights...

STEP 3

... but only after the multi-plug has been disconnected. Don't just yank them out!





4



5



6

STEP 4
Now that you have access, you'll need to remove the four T30 torx bolts that are easily visible on each wheel arch liner.

STEP 5
Once that's done, remove the two plastic push fittings along the bottom of the bumper.

STEP 6
Now remove the three 10mm bolts that secure the wing to the bumper. After this, the bumper will easily come away from the car. ➤

PERFORMANCE **FORD**





STEP 7&8

With the bumper removed, you need to get shot of the standard intercooler. This can be done by removing the bolts to the left of the crash (bumper) bar, and loosening the ones to the right – you'll have access to the securing bolts on the intercooler then.

Once the hoses are disconnected and the old intercooler is out of the way, you can install the new one. You'll need to fit the supplied 90 degree alloy pipes and insert them into the factory hoses. Then, via the alloy brackets supplied, you can fit the intercooler and install the two silicone connecting pipes.

Finally, there is a bracket that needs to be installed by drilling and tapping a hole – though AirTec supply tapping tools. After that, it's simply a case of tightening all the hoses, bolts and clips before reassembling the front of the car by going through the instructions in reverse order. See, we told you this was easy!



SETTING UP AND OPERATION

In the case of both the 1.0 Fiesta and our Mondeo, the setup is simply the fitting. There's nothing to play with or re-set – once it's on, it's on. We would suggest you maybe go back to it and check everything is still tight after 500 miles or so, and have a good listen for any potential boost leaks from ill-mounted pipework (though in reality, you'd have to work hard to fit the boost pipes incorrectly).

As for operation, the main thing we noticed in our Mondeo was the slightly smoother running of the car. The old intercooler was A) 1/3 the size of the AirTec one and B) knackered. As such, the new part really brought some life back to the old girl. Furthermore, with things like a BlueFin and a turbo rebuild planned in the very near future, we can be confident that the intercooler will be able to cope. There's a lot to be said for the value that comes with peace of mind, and value is something a new intercooler delivers in spades. ☑



Fitting to Mondeo - A Cautionary Tale

Originally, the goal here was to do a step-by-step guide based around how to fit an intercooler to a Mondeo ST TDCi - makes sense really, considering we have one on the fleet. However, what should have been a two-hour job quickly turned into a downward spiral of frustration, scraped knuckles and much profanity.

Now, let us first point out that there was no issue WHATSOEVER with the frankly brilliant intercooler that was sent to us. Look, it all might sound a bit gushing, but trust us. It's still on the car now and we're over the moon with it, it's a brilliant bit of kit - especially for just £280.

The point we're trying to make here is that, should you want to fit an intercooler to an older Ford, you need to be prepared. We weren't, somewhat foolishly, and it made the job twice as hard.

As such, here are some important pointers to make sure that everything goes smoothly for you.

- Check all the current fixings on the car for any signs of damage.
- Lubricate, lubricate, lubricate. If you don't, bolts will shear and you'll shout. Lots.
- Take your time and be methodical, because you'll only do things wrong if you're not.
- Examine clips and fixings. They're lovely and pliable on a newer car. On a weathered, older car they will be brittle and all too keen to snap. It would be worth buying some from Ford beforehand just in case, trust us.

Basically, older cars have history. They could have been taken apart or subjected to a minor knock here or there. This means that despite the brilliant and in-depth instructions supplied by AirTec, you're going to come unstuck. An hour's prep the day before could save you a day of wasted labour - trust us.





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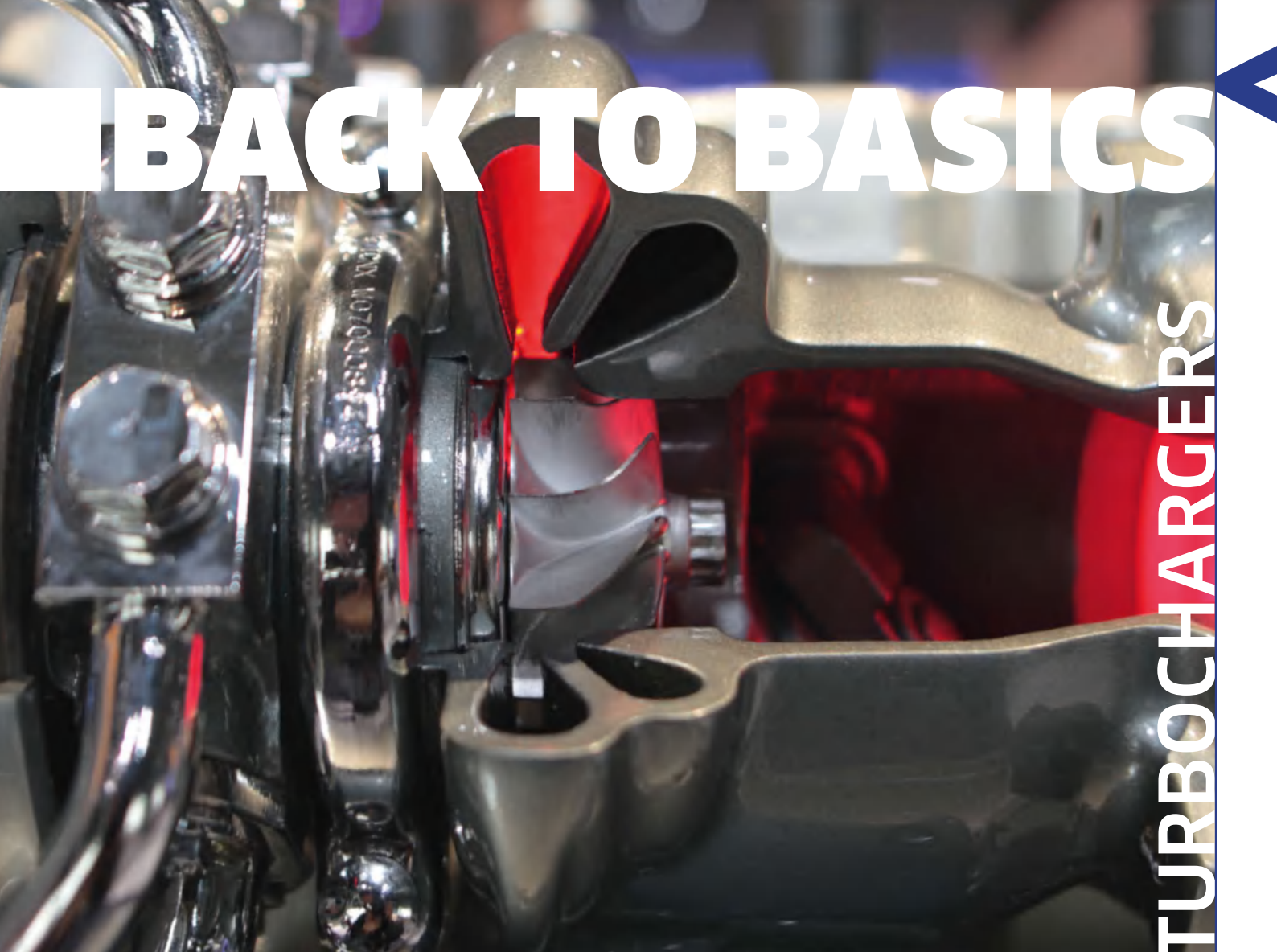
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Turbochargers

Turbos have been a key part of performance Fords for years. Here's the basics on how they work and what they do.

JIM BLACKSTOCK TURBO TECHNICS

A As we saw last month, on normally aspirated engines, there is a fundamental limitation to what air can be breathed in – and hence, what torque can be produced – by an engine. The pressure difference which gets air moving into the engine cannot realistically be more than atmospheric pressure (notwithstanding the benefits of pulse tuning or using momentum of incoming or exiting gases) due to the partial vacuum developed within the cylinder as the piston moves downwards.

However, a simple way of extracting more torque – and hence, power – from an internal combustion engine is by forcing more air into the engine. More fuel can be burned in the additional air and hence, more output. There are effectively two ways of doing this, both under the banner of 'Supercharging'.

Superchargers

These are mechanically driven air pumps that force greater quantities of air into the engine. Strictly speaking, they don't compress the air but simply move more of it, increasing the volumetric efficiency past 100%. The most common form uses a pair of intermeshing helical rotors which can impart a small degree of compression to the air but there are also other forms. ➤





However, there are currently no models in the Ford range using superchargers – the last was the previous version of the Mustang.

Turbo-superchargers

Turbochargers – or to give them their full

name, turbo-superchargers, as they are a subdivision of superchargers – are far more common, since they can be used to increase the performance and efficiency of virtually any engine and, on production-line cars, help to manage the difficult relationship between performance and economy/efficiency.

Unlike a traditional supercharger, a turbocharger is driven by exhaust gases exiting the engine. Whilst a mechanically-driven supercharger will absorb some of the additional power it generates through driving it, turbochargers use 'free' energy from the exiting exhaust gas. However, this doesn't mean they effectively generate power from nothing – they present a restriction to the exhaust gas but the gains far outweigh any losses.

The exhaust gases exit into a turbine housing, where they cause the turbine to turn – a similar process to a water wheel in a watermill.

Generally, the turbine is formed on an integral shaft, which passes through the turbocharger's core, housing the bearings and potentially, a water-cooling jacket. On the other end of the shaft is the impeller or compressor wheel. This draws air in axially – in line with the shaft – and due to the design, forces the air out centrifugally into a volute housing. This directs the air into the inlet system and as part of that process, increases the pressure that the engine sees – this is known as boost pressure and is expressed above atmospheric.

The boost pressure needs to be regulated for a number of reasons; if it gets too high, then the dynamic compression ratio, and hence the pressure within the combustion chamber, can become too great with thermal or physical damage occurring to some or all of the components. In addition, if all the exhaust gas were forced through the turbine housing, the whole unit might end up spinning too fast (overspeeding) with damage resulting to the turbo itself or one of the wheels. Typically, a turbocharger spins at up to 250,000 rpm.

Most forced induction systems use a wastegate mechanism to allow the exhaust gases to bypass the turbine housing and exit directly into the exhaust pipe, to limit the turbocharger's operating speed and hence, boost.



Turbo lag

Because the turbocharger is driven by exhaust gas, there will always be some element of turbo lag, ie the difference in time between the driver planting the throttle and the turbocharger actually spooling-up (accelerating to operating speed) to produce boost. This is known as turbo lag and is one of the areas where superchargers can have an advantage, since as they are mechanically driven, there is no lag.

One of the most obvious and well-known factors that affect turbo lag – as well as how the boost characteristics are developed – is the physical size of the turbocharger itself, ie the diameter and depth of the turbine and the compressor wheels as well as the air ratios (A/R) of the turbocharger's housings.

The larger either wheel is, then the greater the rotational inertia and the longer it will take for the turbocharger to spin-up. So, for the best response, a physically small turbine and compressor should be best. And indeed, generally speaking, they are. However, there are limitations, because a small turbocharger responds well and gives good low to mid-range performance but it cannot move the large quantities of air at higher engine speeds to produce high power outputs.

On the other hand, a physically larger turbo, with a large compressor wheel, will be able to produce the necessary air flow and boost pressures for large power at high engine speeds but it will take a long time for this to reach operating speed and as it does so, the large amount of boost can cause a very pronounced transition from no/low-boost to on-boost.



Lag elimination

In recent years, there have been a series of innovations to help to eliminate lag from larger turbos, to gain the mythical blend of response and performance. Twin-scroll turbos use two distinct paths within the exhaust turbine housing; one to provide sharper response and one to generate high-speed, peak flow to try to achieve the best of both worlds.

Variable geometry uses moveable vanes within the turbine housing to change the way in which the exhaust gases interact with the turbine wheel, depending on the engine speed and demand.

Another method of helping to reduce lag

and improve response is to prevent the turbocharger from stopping spinning, so that when the driver calls for torque from the engine, it is already part-way up to speed. There are two solutions that can help here.

The first is a dump valve that vents boost pressure to atmosphere when the throttle is closed. When the engine is running with part or full throttle and the turbocharger is producing boost, if the throttle were to suddenly shut – the driver lifts off the pedal – then the incoming air charge would stall against the throttle butterfly. It would back-up and eventually, the wall of stationary air would reach the turbocharger and stall it ➤





as well. The dump valve vents off the boost pressure so that it doesn't backup and stall the turbocharger, helping to maintain some rotational movement of the unit.

Another - more severe - method is antilag. Originally developed for motorsport and still massively beneficial in rallying, where the driver needs full performance instantly, this keeps the turbocharger spinning artificially when the throttle is closed.

There are several ways of achieving this. The most basic involves retarding the ignition and adding additional fuel, so that when the anti-lag is in operation, the spark is firing an air/fuel mixture within the cylinder when the exhaust valve is open. The combustion takes place partly

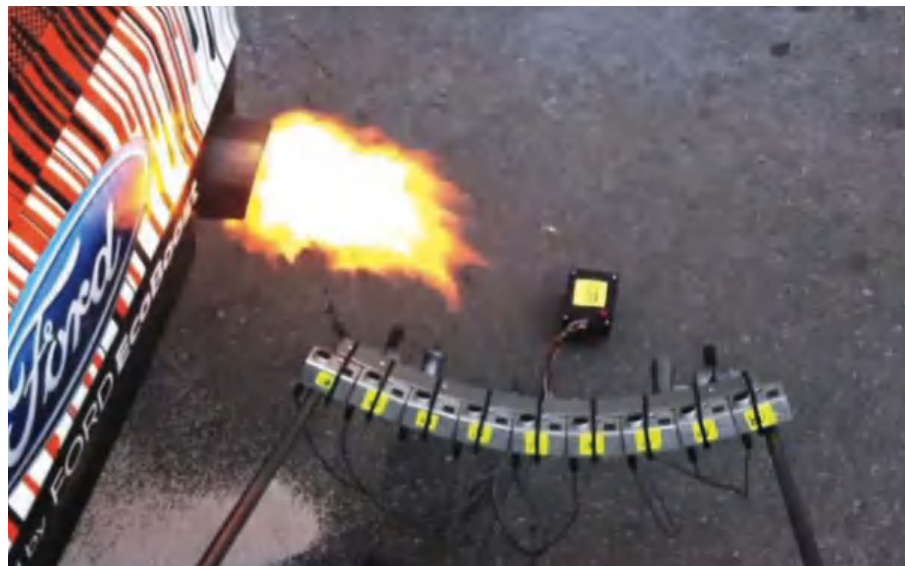
in the cylinder and partly in the exhaust manifold, with the resulting expansion keeping the turbo spinning. However, this clearly generates a huge amount of thermal energy within the exhaust system and the turbocharger itself, limiting life. The second system bleeds a small amount of air past the closed throttle and directly into the exhaust system, upstream of the turbine housing. Fuel is fed into the same area by over-fuelling the engine, which then burns to produce the expansion and energy to keep the turbo spinning. This is a far more accurate system, since the way in which the air and fuel are introduced into the exhaust system can be managed to ensure the turbocharger is at the correct speed for any given engine conditions.

Detonation

Another factor crucial in forced induction - whether super or turbocharging - is avoiding detonation. This is the uncontrolled burning of the air/fuel charge in the engine and can result from several factors, one of which is the temperature of the incoming charge. Too high and the whole mixture becomes too volatile for it to be controlled just by the spark and the engine can suffer detonation, or knock. This can be mitigated in several ways, one of which is the introduction of an intercooler. The most common, an air-to-air radiator, forces the inlet air through an aluminium core which is mounted in the main air flow at the front of the car. The air flowing across the intercooler removes thermal energy and hence, moves the engine further away from detonation.

Water injection can also be used, often with methanol mixed in with the water. A fine spray of water/methanol is introduced in to the incoming air stream after the turbocharger. The latent heat within the air vaporises the water/methanol mix with a resulting reduction in thermal energy and temperature.

Whilst one forced induction device is a good thing, multiple devices can be even better. Several manufacturers - though not Ford - have experimented with this in the past. The second-generation Mazda RX7 used two turbos one after the other, with a small one providing boost from low to mid-range and a larger version taking over at the mid-range and up to the maximum engine speed. Lancia also used a supercharger and turbocharger on its Delta S4 Group B rally car, with the supercharger giving instant low to mid-range response and the turbocharger, the ludicrous power outputs that were familiar on the cars of the day. ☐



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ROAD TO RACE

BRITISH TOURING CAR FOCUS

This month, we look at what goes into AMD Tuning's BTCC Ford Focus racer

 JIM BLACKSTOCK  CHRIS POLLITT





L Last month we compared the Fiesta RS WRC car with its road-going cousin. This month, we're looking at what goes into creating a Focus to compete in arguably one of the world's most competitive tin-top circuit race series, the British Touring Car Championship.

The BTCC has always been one of the world's premier saloon car series but in recent years, has adopted a series of technical regulations that have slashed the once-horrific costs of competing in a bid to entice as many manufacturers, independents and privateers into the series as possible.

The result is a set of standardised practices that mean a privateer can, theoretically at least, compete with the manufacturers for overall victory. This, and the way that cars are ballasted based on success and reverse grids, mean that the three-race-per-weekend format has never been more popular.

We spoke to AMD Tuning's Shaun Hollamby to find out what goes into building a Focus capable of running at the sharp end of the field in the most competitive, cost effective national saloon car series around.

STANDARDISATION

Much of the thinking behind the modern BTCC – and indeed, the competitiveness of the series – is the result of adopting a range of standard spec parts that every car must use. For example, engines, transmissions, front and rear complete subframes. Not only does this ensure equality across the cars and hence, generate close racing, but economies of scale mean that costs are kept to a manageable level, as the huge grids demonstrate. Hollamby reckons the cost of a BTCC car is in the region of £200,000 plus the engine, compared with its bigger brother, the FIA World Touring Car Championship version, which would be closer to £750,000.

CHASSIS

The basis for the AMD Focus is a standard, off-the-line bodysell. However, the BTCC regulations stipulate that everyone uses the same integral front and rear subframes. These hold the engine, transmission, suspension and brakes for the front unit and at the rear, the suspension and brakes. The thinking behind all cars using identical subframes means that there is performance parity among the cars for close racing but also, repairs are made easier since the entire unit can be replaced if necessary.

To mount the subframe in the Focus, it bolts directly into the chassis and so six mounting points need to be fabricated, both at the front and at the rear, as well as into the roll cage. This is fabricated to an approved MSA (Motorsport Association) design by WPMS for AMD, as for much of the grid, and this creates not only a safety cell for the driver but also increased overall rigidity in the car.

BODYWORK

The bodywork must resemble the standard car, so the front grille, for example, is original Focus. The doors, tailgate and bonnet must remain in metal but the wheelarch extensions, required to cover the standard 1890mm width, can be formed in fibreglass – no carbon allowed, to control costs. Think road car on steroids... exactly what BTCC cars should look like. ➤





INTERIOR

The wheelbase can be increased by a maximum of 10mm to allow fitting of the standard front and rear subframes and it is this that determines a car's inherent strengths. For example, a longer wheelbase might be more stable on faster circuits whilst a shorter one could be more nimble on tighter, twistier ones. The Focus tends to be in the middle.

The rear wing is a standard item for all cars, with its mounting and angle fixed. However, all cars must undergo wind tunnel testing to establish the exact fitting position so again, no-one has an advantage.

INTERIOR

As you'd expect, the driver's seating position is moved as far back and into the centre of the car as possible, to minimise the height of the centre of gravity and make the car as nimble as possible. Getting the right weight distribution with a driver who weighs around 80Kg is crucial to managing tyre wear over the course of the weekend.

The standard dashboard panel is retained but is flocked to reduce glare and reflections whilst all cars use a Cosworth Pi dashboard and electronics. This gives the driver various parameters they can alter during the course of the race, including the power steering effort and four engine maps.

One is a maximum power setting, two give different throttle characteristics and the fourth is a wet setting, pulling the torque back in the lower gears and making the throttle more progressive. There is a Corbeau seat for the driver, with Luke harnesses, FIA anti-intrusion panels in the doors and a standard pedal box, used across all cars.

SUSPENSION

Again, the same set-up is used on all cars, with upper and lower wishbones front and rear joined to inboard, pushrod-operated Penske dampers with rose joints at all ends. There are multiple adjustments possible, including toe angles, camber, caster, ride height, damping and, to a degree, the track. Springs are free, so typically, the team will carry 10-15 sets of coils to each race to cater for every eventuality whilst the driver has a choice of two anti-roll bars. These can be adjusted but not by the driver nor during the race itself.

BRAKES

Again, standardised across the field, steel discs and AP Racing calipers are used with two choices of pad material available - Raybestos and Project Mu, the latter launching a road car pad off the back of its success in the BTCC later this year or early next. The rear discs are larger than those that used to be used in the S2000 era, since now cars use independent rear suspension, they can be made to work properly.

TRANSMISSION

A spec XTrac six-speed sequential box is used with common driveshafts but the ratios can be chosen from 16 sets of homologated options. The plate-type limited slip differential can have its pre-load and clamping forces adjusted, which is a crucial area in getting a front-wheel drive car to work properly. The shift lever includes a micro-switch to trigger the electronic gear-cut which momentarily cuts the ignition to allow the dogs to disengage and re-engage.

The clutch is a spec AP carbon item and, with the gear-cut, flat shifts are used on up-changes. On down-shifts, some drivers use the clutch, some don't. It can help with smoother gearchanges in the wet whilst some drivers left-foot brake and some right-foot. ➤





INTERIOR BRAKES





TYRES

ENGINE



ENGINE

All engines are two-litre, turbocharged petrol, either the TOCA control engine, based on a Vauxhall unit or a homologated unit from the car manufacturer's family. AMD uses a turbo Duratec, prepared by Mountune and delivering a strong and reliable 350+bhp. The turbo itself is from Owen Developments and again, is a spec unit as is the intercooler core whilst each team uses its own tank. The turbocharged engines can use anti-lag if it will be a help – it tends to assist bottom end and low speed use but depends on the driver and the circuit. Too aggressive and it can stress the front tyres too much with a resulting drop in pace. AMD uses a Cobra exhaust system, which is free and exits the side of the car and lubricants are from Millers Oil.

TYRES

Everyone uses Dunlop SportMax tyres, with a choice of hard or soft slicks and also, full wets – no intermediates – but the wet also comes in soft and hard. Soft tyres must be used by every car during one race over each race weekend, since this mixes up the action as they are faster to start with but the pace drops off in the second half of the race. 🏁

	Ford Focus ST-3	Ford Focus BTCC
Power	250PS@5500rpm	350bhp
Torque	360Nm	Not specified
Length	4360mm	4400+mm
Width	2010mm	1890mm
Weight	1316Kg	1280Kg (dry)
0-100Kmph	6.5 seconds	Depends on gearing
Maximum speed	248Kmph	Depends on gearing
Maximum braking	Unknown	Not specified
Cost	£26,300	£200,000



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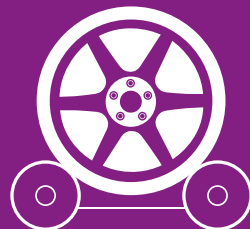
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DYNO OF THE MONTH:

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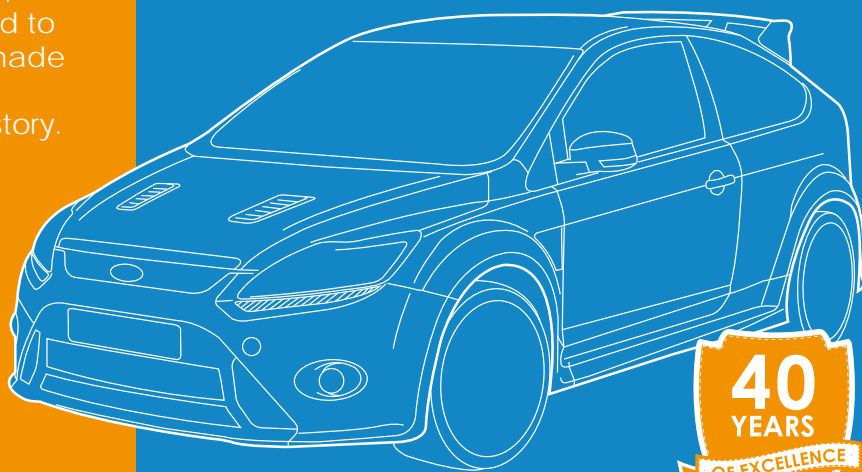
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LUNCHTIME QUICKIE

In a new series, we're going to see what can be done – other than wolfing down a Big Mac and fries – during your lunch hour. This month, we smartened up our interior thanks to Richbrook.

People tend to immediately jump to big ideas when it comes to modifying a car. That needn't be the case. Lots of 'little and often' tweaks can add up to a big change in the way your car comes across. As such, we've decided to see what can be done in a lunch hour in a bid to slowly

transform your car. The premise is simple – the job has to be doable in under an hour and the total cost can't be more than £100.

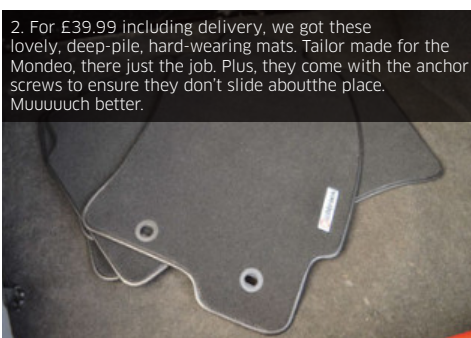
Sometimes we'll be technical, others we'll simply be putting stuff on or in the car. Every time though, we'll be doing something that enhances the car's look. If

you have any ideas, or if there's a quick mod you've done in the past, we want to know. Hit us up on chris@projectviva.co.uk.

This month, we waved some cash at accessory supremo, Richbrook, and sorted out the innards of our Mondeo ST, all in less than an hour, and all for less than £100.



1. Hmm, this is decidedly rank. £15 mats that look rubbish, lets the whole interior down. SOMETHING MUST BE DONE!



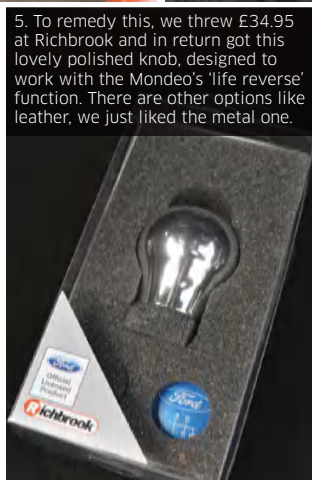
2. For £39.99 including delivery, we got these lovely, deep-pile, hard-wearing mats. Tailor made for the Mondeo, there just the job. Plus, they come with the anchor screws to ensure they don't slide about the place. Muuuuuch better.



3. Mats in (front and rear for your £39.95) the interior already looks ten times better. Clean is good, and as the simple design of the mats goes to show, less is more.



4. There's nothing worse than a worn knob (insert Sid James laugh). As such, we opted to change it for something a bit more hard-wearing and a bit more tactile.



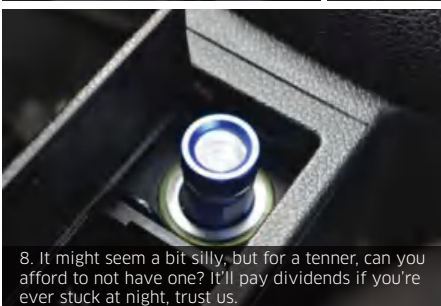
5. To remedy this, we threw £34.95 at Richbrook and in return got this lovely polished knob, designed to work with the Mondeo's 'life reverse' function. There are other options like leather, we just liked the metal one.



6. Oh yes, there we go. Not over the top, whilst clean, functional and a pleasure to shift with. Screw the old one off and the new one on, WINNER.



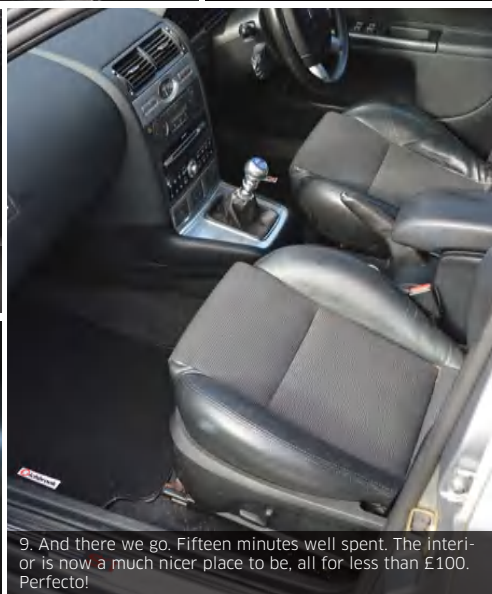
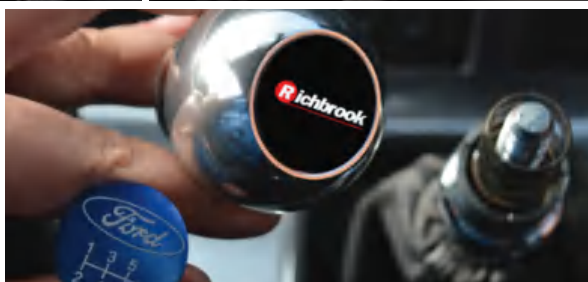
7. We can't lie, we didn't need this torch – we just liked it. It was £10.95 and it plugs into the 12v socket to charge up.



8. It might seem a bit silly, but for a tenner, can you afford to not have one? It'll pay dividends if you're ever stuck at night, trust us.

CONTACT

It's fairly obvious that we did this month's mods via the help of Richbrook. For a closer look at their impressive range of products, head over to www.richbrook.co.uk



9. And there we go. Fifteen minutes well spent. The interior is now a much nicer place to be, all for less than £100. Perfecto!

MOTORSPORT ROUNDUP



Photography by Colin Mileman

ROCKY ROAD

As you may have noticed, this month is a very US themed issue. One thing the US know how to do well is entertaining motorsport! If only we had truck racing over here. The Ford Performance cross country racing team ended a hard-fought 2015 season in second place in the Production Vehicle category.

The final race proved to be a successful

outing for the Ford Performance team. Drivers Chris Visser and Japie Badenhorst drove their Ford Ranger into the runner-up position over the punishing 430km course.

To fill you in, the Atlas Copco Gold is a seriously difficult event. In fact, out of 33 starters only 17 finished! Punctures were the main cause of failure as the terrain is extremely rocky.

All of the front-runners picked up punctures on the opening stint, but the Ford Performance chaps came up with the goods. Chris Visser enjoyed the battle: "It was an extremely tough race, with lots of hazards all over the place, but I'm extremely happy to have made it to the end and ensured that we finish on the podium. This is a great way to end the year."

WE WANT YOU!

Are you competing? Do you have a car, a team and a story that would engage the masses? Do you want to be in the UK's best Ford magazine? Of course you do! Drop us a line at chris@projectviva.co.uk and tell us what you're up to.

STOCK CHECK

Blue Oval power dominated the top finishing positions in the ACT Late Model Tour Championship, and the podium at the season finale at Thompson Speedway in Connecticut. The ACT Tour is the American/Canadian series for late-model stock cars and has proved a successful series for Ford.

The team of Bruce Bernhardt and Wayne Helliwell Jr. captured the Tour Championship with Joey "Pole" Polewarczyk and Bradley Babb completing the sweep of the top three finishers. All three are powered by Ford Performance Parts S347JR Sealed Racing Engines.

Brian Hoar drove the RPM Racing Engines Fusion to a win in the World Series 100 at Thompson Speedway with Babb finishing second. This marks the third ACT Championship for driver Wayne Helliwell Jr. and car owner Bernhardt.





HIGH PLAINS DRIFTER

This beast is the new competition-spec 2016 Monster Energy Nitto Tire Ford Mustang RTR drift car – quite the mouthful! There's no denying it's a gorgeous car, just look at it!

Unveiled by World Champion Drifter, Vaughn Gittin Jr., at the SEMA Show in Las Vegas, this Mustang is like no other. This Mustang features RTR independent front suspension, coupled with sticky Nitto Nt05 tyres.

Under the bonnet is a 436 cubic-inch Ford Performance/Roush Yates-built engine which revs to 9,000rpm with over 900bhp. We're excited about seeing this car in action, and so is Vaughn: "It's crazy to think that I'm driving the equivalent of a 9-second drag racing car... sideways. Needless to say, I'm pumped to get out there and have some fun!"



PERFECT SCORE

Ford Performance is dominating once again, this time in the Red Bull Global Rallycross series. Olsbergs MSE's Joni Wiman claimed his first career victory at the Village Lot in Las Vegas, Nevada.

This win clinched a Manufacturers' Championship for Ford for the fifth time in five Global Rallycross seasons, which makes it the most successful team in the series.

In fact, Ford have been so successful there has not been a Global Rallycross race in the series' history without a Ford Fiesta

on the podium, and Ford has previously captured four drivers' championships.

"Our organization is incredibly proud of the continued success the Ford Fiesta ST has seen in the series," said Dave Pericak, Global Director at Ford Performance. "Five Manufacturers' Championship titles in five years is certainly an accomplishment. It can be attributed to a combination of the engineering of the vehicle, as well as the hard work and dedication from all the teams and drivers."



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GIFT GUIDE

Christmas shopping – screaming kids, moody adults and traffic chaos. Avoid the crowds with the PF Christmas Gift Guide, we've done the legwork so you don't have to. If you're like us, then you'll have a bunch of mates into the Blue Oval too, so take a look at what we've found for the Ford fan. It's also a good idea to leave this page open on a loved one's coffee table to find...



WATCH IT!

The new Casio Infiniti Red Bull Racing Limited Edition watch, inspired by Red Bull racing F1 car colouring, with special ion-plated bezel, makes for a pretty special gift. It's large case and watch face makes quite a statement. Unbelievable craftsmanship, hi-tech features and the iconic Red Bull Racing logo, it's more than just a watch.

£170

EDIFACE-WATCHES.CO.UK



LOGO LOCO

Represent the brand with these branded goods from DMB Graphics. Forget slogans and bizarre graphics, sometimes the Ford logo is cool enough on its own. These Ford tees are perfect stocking fillers for the Ford nutter you know.

£12.76

DMB.UK.COM

WRC ...RC

Why should toys just be for kids? We love RC cars and they're great fun on Christmas Day. This Ford Fiesta WRC is an iconic design and this RC version is a good performer. With snappy handling and quick acceleration, it's hard to resist.

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HARAHAPHOBBY.COM





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RICHBROOK.CO.UK



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MAKITAUK.COM

QUICK SPRITZ

Sometimes you need more than a Magic Tree. These Dodo Juice air fresheners give more bang for your buck than the traditional card variety, and they make for great stocking fillers. Tactfully tell somebody their car smells this Christmas!

£3.99

DODOJUICE.COM



THESE BOOTS ARE MADE FOR RACIN'

Look great and use that clutch like a pro with these Piloti shoes. Somewhere between a race boot and a trainer, these Piloti Spyder S1s are super comfy and designed for driving. They also happen to be a rather Christmassy shade of red...

£115

PILOTI.UK.COM



GLYMMER & SHIMMER

Go the whole hog with this Autoglym 'Perfect Bodywork, Wheels and Interior' collection. Neatly packed into its own carry case, the set has pretty much everything you need to clean your Ford. These are top quality products in a tidy package that works really nicely as a special gift.

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AUTOGLYM.COM



COOL TOOL

Without a doubt, one of the most useful items in anyone's gadget arsenal is the multi tool. This 11-function multi tool from Sealey is our pick, it's got a bottle opener, can opener, a large fine edge blade, a small screwdriver with slotted/phillips bit, a large screwdriver with slotted/phillips bit, a saw, spring loaded pliers, wire cutters and wire strippers!

£40.74

SEALEY.CO.UK



ANYONE FOR COFFEE?

Nothing says 'I love cars' like a V8 table! Vee 8 Design build their tables from a wide range of engines, including those of Range Rovers, BMWs and Mercedes as well as some more exotic marques such as Rolls Royce and Maserati! Certainly a showstopper when it comes to coffee time. Also, you can get in touch with Vee 8 Design if you want one bespoke made - a Ford engine perhaps?

£520

VEE8DESIGN.COM



MICRO MACHINE

Another mini Ford for those into their Scalextric, this is one of the coolest little RS200s out there. Unfortunately, very few of us will ever be able to afford an RS200, but we can all live the dream with this analogue slot-car - hours of Christmas Day fun.

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GOLDSTARSTOCKISTS.NET



HD SHADES

On the track, on the strip, or simply popping to the shops, we all want to record every moment in our Ford. The Sunnycam allows you to do so without taking your hands off the wheel! These shades allow you to record High Definition 720p video, record audio and take photos.

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SUNNYCAMGLASSES.COM



YAY FOR CLAY

The Clay Mitt Supreme from 'The Clay Cloth Company' is their answer to the clay bar. It's designed to effectively remove contaminants like tree sap, dirt, tar and atmospheric pollutants, often not visible to the eye! Keep your paint in top-notch condition with this clever mitt.

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THECLAYCLOTHCOMPANY.CO.UK



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CARAUDIOSECURITY.COM



MAT ATTACK

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Buying From Auction

Don't be put off by that bloke talking too fast. The auction house could be the place to bag a performance Ford bargain. We won't send you in unarmed though, hence this handy guide!

CHRIS POLLITT VARIOUS

A Ahh, the good old auction house. As reality TV would have you believe, auctions are places where fat, middle-aged people buy crap from an indecipherable man which can then be sold on for a massive profit. This is not the case, thankfully. Don't believe everything you see on TV - auctions can be a place to find bargains, especially when it comes to cars.

Think about it, every car you see on a forecourt is being sold for a profit, even the bargain ones. So where the hell is the dealer finding his margin? Through buying at auction in most cases, that's where. The cars normally come from wholesalers who, nine times out of ten, just want to get back what they're owed, and in most cases, that figure is a lot less than a retail value. They process thousands of cars a year, so it's a numbers game. The fleet companies, Motability, large retailers - they don't have time to deal with an individual customer/car. They just want them gone.

Auctions are not, provided you deal with one of the bigger ones, a place where the cut-and-shut, ex-minicab, clocked, damaged cars go to die. They're merely a place that facilitates the easy redistribution of stock for

business with a lot of motors. As such, if you strap on your brave pants, resist the urge to raise your hand every time the auctioneer says something and most crucially of all, keep your head about you, you could score a bargain.

Still not sure? Don't worry, we like you and we want you to get the motor of your dreams. As such, we've compiled a handy selection of tips so you get the right car, not a 1993 Nissan Micra with a 'powered by fairy dust' sticker on the boot.

THE AUCTION HOUSE

As we hinted at earlier, the auction house is not what you might remember it to be. When we were a kid, going to the local auctioneers on a Saturday with our dad was a scary affair. Lots of surly looking men getting far too defensive over anyone who looked at a car they themselves had shown interest in. More fag butts on the floor than feet. Lots of people displaying their 'knowledge'. To be honest, nine times out of ten we were only going because dad wanted a look, but when he did bid for a motor, it was a scary experience due to the hugely questionable nature of the cars in question. Generally, it was not enjoyable.

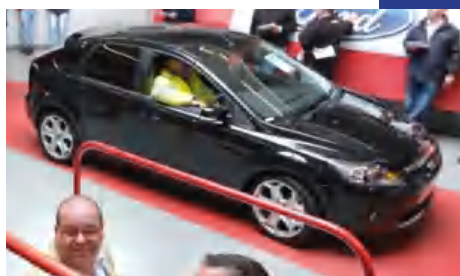


Now though, it's evolved massively. Car auctions are hugely professional, the like of Manheim and BCA have seen to that, raising the bar for all involved. Everything is regimented, cars are fully checked before going to sale, they're imaged and put online in most cases and the prices are monitored so as to keep the playing field level. Nobody sells a car at auction for a quick profit, they sell them because they're a physical asset that needs to go.

Most big auction houses have taken a great deal of risk out of buying a car, care of the checks and administration carried out before they agree to sell a car. It's logical really - they want the buyer to be satisfied, not irate and disappointed. They want you to come back time and time again, so they take a lot of the legwork out of the process, as can

usually be identified with the information sheets that most cars will have in the window. These sheets state the type of source, the mileage, the number of owners, the history, so on and so forth. It wasn't so long ago that all you'd have to sway your decision as to whether or not you'd bid was simply having the car in front of you. Imagine looking at a car parked in the supermarket car park and being asked to decide whether it's a good buy? That's what it was like.

Basically, auctions used to be seen as the seedy underbelly of the motor trade, but that's far from the truth now. In fact, it's probably a better way to buy a car thanks to the lack of a smarmy salesman trying to sell you finance and paint protection. ➤





Some specialist auctions could see you bidding on cars like this...

PREPARATION

Preparation is absolutely key if you want to walk away with a decent motor. Turn up on auction day with no idea what's there or what you want and you'll be lost. The selection is vast, you'll lose your head and it'll be a stressful experience.

Go online first and find the lots (cars) that interest you. Write them down and stick to them, then when you arrive at the venue you can take your time to hunt them out and have a good look at them. It'll be less stressful and much more informative. If something else catches your eye, that's fine, but make sure you check out the cars on your list first before being distracted. Just be methodical, basically.

The other, most important thing you can do before buying at auction is go for a 'dry run'. Just go along on an auction day and see what goes on. Find some cars and watch the process they go through, see what they sell for, stand quietly at the back of the auction hall and take in the bidding process. It'll prepare you for the day you actually come to buy a car yourself.

Finally, know the fees. Each auction house varies; some will want a percentage, some may have a set fee depending on the final sale value. None will ask you to pay in full on the day, though you can if you want. Just make sure you have the money to cover any potential fees, so as not to waste your time or that of the auction house. Once the fees are paid, you'll have a few days to settle the balance and collect the car, simple.

THE AUCTION

Ahh, this is the fun bit. The fast-talking, the numbers, the waving of arms and the hectic pace of it all – it's exciting. It's also centred round the people bidding, not the man shouting the numbers. You're the one that

matters because you're the one that will be spending money.

You don't have to wave your arms around like a loon when your chosen vehicle rolls into the room. Just a gentle nod or show of your bidder's paddle will be enough to ensure his keen eye finds you. When it does, it's you and him. Just listen, don't get distracted by the rest of the room, don't even get distracted by the other bidders. It's you and him and once you start bidding, he'll not let you go until you or the other bidders back down.

Speaking of backing down, it's a very important thing to remember your budget. Do NOT go over it, do not get carried away and worst of all, DO NOT TRY TO BEAT ANOTHER BIDDER. This is business, it's a transaction and it's nothing personal. If the guy you're bidding against wants to pay over the odds, let him, it's his money. Don't get all flustered because HE wants YOUR car. It's not your car, and he doesn't matter. Just stay cool, let it go, and wait for the next car on your well-prepared list. Plus, if he's bought one already, his money is decreasing, along with his bidding power for the next lot.

CONCLUSION

Buying a car from auction is not a daunting task, it's an avenue that any car buyer should consider. Yes, there's the issue that it won't come with a warranty, but for you lot, is that a bad thing? You're only going to slap on a load of modifications anyway, right? Plus, cars are a bit more resilient than they were 20 years ago – they're tougher, so less likely to be hiding secrets.

Do your research, go for a dry run, find your feet and you could be onto a winner. Cars at auction can be 10-20% cheaper than on the sales pitch, a saving well worth considering. Plus, most of the cars have found themselves at auction because they've been replaced by something newer, not because they're hiding a nasty secret. Seriously, if you're thinking about buying a new motor, we think you should have a look at this route. ☐





...to this.

DO

- Go at your own pace
- Plenty of research
- Go on a 'dry run'
- Select potential purchases before going
- Have the money for the fees
- Take a seasoned friend if you know anyone
- Talk to people there, it's actually a friendly place
- Have fun with it, it's exciting

DON'T

- Panic. No one has a gun to your head, you're in control
- Buy the first car you see
- Get carried away with bidding - **STICK TO YOUR BUDGET**
- Get stressed when bidding
- Buy anything you're not totally comfortable with
- Get into a bidding war with a stranger



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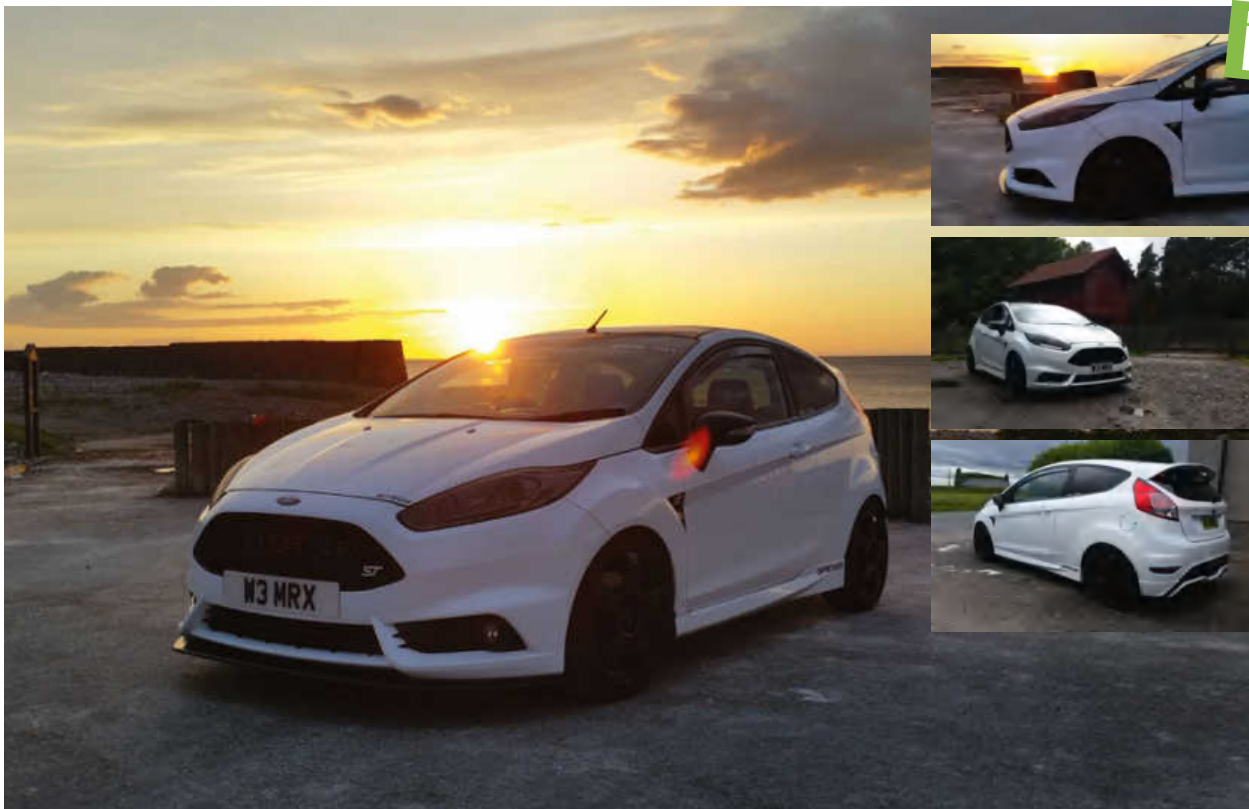


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**MARK WEBSTER**

This is Mark's Fiesta ST-2, and it's a beautiful beast. A good looking ride with some grunt to back it up, we'll let Mark take it from here: "I have owned the car since May 2013 and have lost count of the amount of money I have spent on it! I was one of the first owners to have the Mountune MP215 kit fitted in the north of Scotland and ran that on the

car for about a year, but was craving more power, so jumped over to Revo, and haven't looked back. I use it as a daily driver come rain, sun or snow mostly in Scotland over the winter, clocking up over 42,000 miles since purchasing it."

Mark's Fiesta's spec is as follows: Revo Stage 2 Remap - producing 245hp at the Flywheel and 249ft/lbs

of torque, AS Stage 2 Induction Kit, Airtec Stage 3 Intercooler, Milltek Cat-Back Exhaust, Mountune Short Shift, Collins Performance Rear Engine Mount, 30/35 H&R Lowering Springs and Triple R Composite Splitter. Those plastics are Gloss Black (Front and Rear), Fly-eye Tinted Headlights and 17" Team Dynamics Pro Race 3 - also Gloss Black. Beautiful!

ZACK ARMSTRONG

Zack's Focus RS Mountune MR375 is a Ford anyone would be lucky to own at any point - but it's Zack's second ever car! More than just an RS, there's a full Mongoose exhaust system, K&N Group A air filter and a lot of chrome under the bonnet from Autospecialists.

"It's been around the UK at many shows," Zack tells us. "It's my second ever car and being just 21 years old, I'm very fortunate to own such a car at my age! It's detailed professionally very often and is kept to a remarkable standard. I hope you like it. It's a pleasure to own!" We love it Zack, and we're very jealous!



**SEBASTIAN MCCALLUM-BOSWELL**

We love an Mk4 Focus, and this XR5 ST225.5 is a great tuned example (we won't mention the plate...!). Sebastian tells us more: "From when I test-drove the ST to the day I bought the car I was in

love with it. It was totally stock from the dealer; I had no major plans initially to change its appearance or performance. However, so far I have put a custom stainless steel 3" exhaust system onto it and I have

recently put a front lip splitter onto it, vinyl wrapped a few parts, bought new badges, coloured the wheels and had a custom licence plate made. I'm loving the ability to customise these cars!" We love it too, Seb!

**JAMIE WILLIAMS**

Now this Focus really makes a statement, Jamie's car has a military style that few can rival. Known as 'Tank', it's a real head-turner – let's take a closer look.

"My Mk1 Focus is heavily transformed," Jamie tells us. "I have spent the last 18 months slowly transforming her and she has had several wrap-colour changes before I was set on the military theme! My project is now near completion. The last thing I want to add to the car is

air suspension, of which only two kits are currently in the UK – and both are on cars, which are off the road being broken."

To break down what 'Tank' has been through, she started life as a completely standard 2002 2.0l Moondust Zetec. In terms of exterior mods, there's an American SVT front (no.5 of 5 in the UK), full custom 3M wrap in Matt Military Green and Custom Printed graphics. Suspension comes in the way of JOM coilovers

wound all the way down with helpers removed. Inside there's a proper light show, with custom LED dashboard and switch swap from Ford Green to Ice White and Blue.

Jamie is no slouch, this has been his baby from start to finish: "All work has been carried out by myself – and I mean everything – from removing suspension to spending hours in the kitchen soldering lights. I work for Blue Lizard signs, so I even wrapped it myself! This really is my pride and joy and I'm so happy with how 'Tank' has turned out!"



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FLEET

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**CHRIS
POLLITT
MONDEO ST TDCI**

BEST BIT:
New wheels and rubber, baby!

WORST BIT:
Blowing a boost pipe.
Stupid pipe.



Busy month for the old girl, mainly because the old girl sort of, well, she died. That's what she did. Died like a dead thing that had died a bit through deadness. At least that's what it felt like at the time.

I have a solid relationship with the ex-wife (trust me, there's a point coming), after all, she is the mother of my Mini-Pollitt. So, when I heard she'd had a crash I was quick to fire up the Mondeo and speed to the scene. In doing so, whilst quite literally getting air over some Somerset backroads, I was suddenly presented with a hell of a noise - she'd blown a boost hose. Bugger. That's probably the hardest that car has been driven in its life though, so I can let it off. Plus, it did eventually limp me to where I needed to be - thankfully the ex was okay.

Sounding akin to a steam train, I



limped the car (driving off boost) to Worcester Mobile Mechanic so they could have a look. Admittedly, driving it 85 miles with a blown hose was probably not the best idea, but I had no choice sadly.

Anyway, Jason from WMM got the car in asap, diagnosed the fault, ordered up the part and had it fixed in a day. This was prior to any mention of me being a magazine editor or the like, it was simply a demonstration of how they operate and how they treat customers. I must say, it was refreshing and took all the stress out of the situation. The fact the sodding hose - 5 inches of rubber, I kid you not - was £50 didn't cheer me up though (thanks Ford, great pricing). But still, the car was quickly fixed and all was well, so huge



thanks again to Jason at Worcester Mobile Mechanic (01905 358217).

What else, er, oh yeah, I got a bit crazy with the paint. Not content with the hum-drum looks of the stock Mondeo, I opted to pull it all apart and make it look a bit meaner care of the liberal application of a lot of black paint. I did the grille and the light surrounds, which took a couple of hours all in all - I think you'll find the



transformation is pretty impressive for a cost of about £15.

I've also had my new wheels fitted. The 19 x 8.5 Wolfrace Assassins are bloody lovely, but they're a bit useless without tyres. Thankfully the helpful bods at Yokohama came to my rescue with some sticky Advan rubber, which, I have to say, has transformed the ride. It's stupidly quiet now, which is great considering the car pretty much lives on the M5. As for grip, yup, I've got a lot more of that, too. This sucker goes around corners far quicker than it has any right to.

Other than that, I've not done a lot. But more is happening, so stay tuned to find out what's in store.

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**CHRIS
POLLITT
ESCORT GTI**

BEST BIT:
Shiny new parts!

WORST BIT:
Oh yeah, I still own it.



STATIC DISPLAY

Sorry, not done anything to the car this month. Been a bit busy trying to put this wonderful magazine together you see! Still, whilst the GTi has been nothing more than a car park ornament, I have made some progress in other areas.

First of all, I've ordered a clutch from the handy folks at Burton Power because, let's face it, if you're going to get bits for a Ford, you're going to get them from there, right? The clutch is an organic fast road/light competition item, so it should totally change the way the car drives. Add into the mix the mass of bushes ordered from Powerflex and we should be onto something.

That's about it, though. But who knows, I might actually drive it at some point in the next month. Possibly.



JIM BLACKSTOCK PUMA 1.7

BEST BIT:

Catching up with people from the Ford world who have helped out over the last nine months.

WORST BIT:

Dealing with hordes of arse-hats with no idea how to drive in the fog



RIGHT ON TRACK

Fate, it seemed, was trying its best to keep me away from the Performance Ford Track day at Brands Hatch. I usually listen to overwhelming evidence that I'm not supposed to do something, but this time I ignored the signs and persevered on my way to the Kentish circuit for what would probably be the last fling of track-based excess this year.

It all started when my fruit-based not-so-smartphone decided to reset itself in the middle of the night. So my early-doors alarm call failed to materialise and I rolled over and glanced at the clock two hours after I should have been woken by a piercing alarm. Much swearing and turbo-shower later, I'm en route to Kent through thick fog and in the height of the rush hour/first school run after half-term.

I eventually make my way to the A1 – solid. I come off, back-track slightly and head across country towards Stansted to pick up the M11 south. I get stuck behind



the very slowest of all slow drivers. Now, I know it's foggy but generally, driving well within your visibility/stopping zone tends to be the order of the day. Not necessarily at a speed where you can stop within the length of your own car. Due to the fog and the twisty road, it's impossible to overtake, so I crawl across country.

Until confronted with a wall of stationary traffic. In fact, the only traffic moving is turning around. A quick squint at the sat nav on my phone reveals a goat-track that can be used to circumnavigate the assumed accident ahead. I follow vans, reps, all manner of vehicles seemingly through fields and hedgerow until we rejoin the right road. Half an hour later.

Of all the journey, the easiest bit was the Dartford Crossing – don't think I've ever crossed the Thames without stopping. Just wish the payment website would work with Safari...

Anyway, arrived at Brands Hatch two and a half hours later than I originally planned, signed in, got my briefing, ate a bacon roll and still, silence. Because

Brands sits in a natural bowl, it makes superb spectating and racing, thanks to the elevation changes. However, it also means once it fills with fog, it stays full for a while.

So on the whole, I was pretty glad my phone caked-out, otherwise I would have sat there for three and a half hours until anything happened. Like everyone else. While we were all waiting for visibility to increase to safe levels, I wandered round and caught up with a few people who'd helped out recently, including Andy Burton from Burton Power and the guys from Supatune.

Eventually, it was deemed good to go at around 11.30 and off we went. I found myself the first car out on the damp but drying quickly track and surprisingly, it was great fun. Pretty quickly I felt like I was up to a similar pace to the summer event I went to with Po – not massively fast but seemed to be hitting similar gear change points at least.

Coming in after one session, Andy suggested checking the tyre pressures.

The Yokohamas had, once again, been excellent but he asked if it felt as if the car was rolling over them as they got hot. It did and sure enough, the pressures had grown from 29psi (cold) to 38psi as they got hot, rounding the tread profile. I dropped them back to 29psi front and 28 rear and went out again. For a couple of laps it felt a bit strange while they came up to temperature – and pressure – again but once they were hot, no more rolling and more progressive response to steering and power.

Four sessions later and the air was starting to get a little duller – the mist and after it, fog, were on their way back. With not much time left on the clock, I decided to quit while I was ahead and break for home before the pea-soup returned. Ironically, this was at the top of the hill where the A20 meets the M25, and so my journey home was a combination of cars with no lights in thick fog and cars with the brightest fog lights in history, in the outside lane, with no fog.



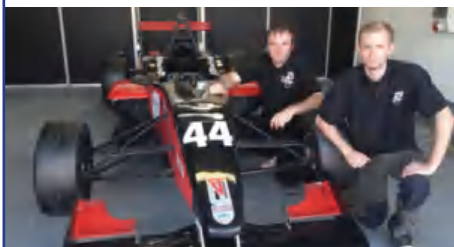
DAN WOODROW F4 TEAM BOSS

BEST BIT:

Being on the pace in the final race and quick through the speed traps again!

WORST BIT:

Not finishing the last race was a sad moment.



With only two weeks between the last two meetings, it was time to go racing once again, but this would be the last meeting of the season for driver and teams. After this weekend a new car would supersede the car with some very big teams from the higher ranks of the single-seater world! With this in mind the team would withdraw their participation from the championship.

The meeting would see the championship supported by the Historic Championships so a lot of cars from yesteryear. The team would make the 440 mile round trip on Thursday afternoon to be at Brands Hatch (racing on the Indy layout) on Thursday night to set the garage up with the team's flooring and boards.

We would have four sessions on Friday to ensure we have the car ready for qualifying on Saturday morning. Our driver opted for used tyres for the Friday as the budget was fully exhausted after a long season, with more extra testing and more tyres than we arranged. The weekend would see us have two sets of slicks to allow the best possible weekend for meeting number eight.

Friday testing was close in terms of times, though James managed to get within 1.5 seconds of the leader and championship winner.

Qualifying started at 11:05 and was to be the closest James would get to the front all season, he would get to 0.8 seconds and would start 18th from the 19 starters. Twenty-three laps were completed in an action packed and sunny session!

Starting p18th for race one which started at 3:55pm, not getting the best start James lost a place going in to turn one. With one driver retiring James finished p18th, showing the car has the speed as does

James on certain sections of the track – he posted the 9th fastest time through the speed trap on the Indy circuit.

Race two started at 11:20am on Sunday morning and would also see James start p18. He would record his best lap only 0.8 seconds behind the pole man, this is a good lap for James compared to the amount of time the leading boys have spent in their cars this season. James finished the race p16, making progress early in the race. James's best lap (which is his best sectors times over the race) would have moved him 0.1 seconds closer on the best lap. He would go even faster this lap moving himself to 8th overall through the speed traps.

Race three saw James start p16 for the final race of the season after a hard fought weekend of high-pressure racing. Unfortunately James wouldn't finish this race as his car had a brake failure which was a sad end to the season, as James was running p12 with only two laps to go he span out at the top of Graham hill bend. His lap time would again be 0.8 seconds behind the leaders, but would see James record 6th fastest through the speed traps.

Team manager Dan Woodrow, added: "This was our last weekend with the car and driver, it's been a long hard season, it's had some ups and plenty of downs, it has felt like this season has lasted more than 6 months! At the start of the season we set out to do this on a tiny budget, our driver has done a bit more testing and used a few more tyres than we set out to do but this has really helped James to improve his driving, he was a total rookie at the start of the year so has done a good job against some very well-funded young, professional drivers who are heading to F1. For James I'm not really sure what the future holds for him, it will be interesting to see if he is back racing next year in the new F4, it's a lot of money to race what is a "junior" category – I think that junior motorsport now is getting out of control in terms of costs, where only the very rich can compete. It's very sad as the days back in Formula Ford you could turn up with your dad mechanicing but now these days are over and money talks at this level. I wish James all the best for the future. We aren't sure what the future holds for the team, it may take a year out and take stock of what happens in 2016."



NEXT MONTH

>> **A BEIGE SIERRA ESTATE!**
WELL MAYBE



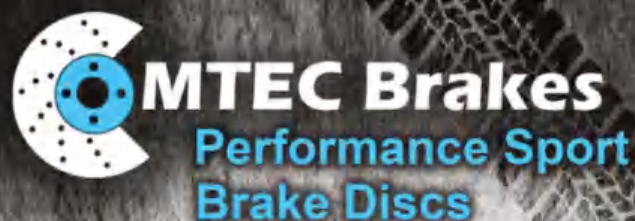
>> **AN ESCORT VAN**
POSSIBLY

>> **A FIESTA**
OF SOME DESCRIPTION,
POSSIBLY A PURPLE ONE

>> **TECH, OF SOME DESCRIPTION**
WE DON'T KNOW WHAT YET

>> **ANOTHER FEATURE CAR OR
TWO, PROBABLY**

*Contents subject to the Editor changing his mind at the last minute



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VALET PRO BEADING MARVELLOUS

Here's another wittily named product from Valet Pro. We've grown to love their almost hair product-like style, particularly as they tend to have the great results to back it up, too. So, how does 'Beading Marvellous' stack up?

This product is carnauba wax, which is actually palm wax from Brazilian palm trees, sounds oh so natural, and it is. There's no dodgy chemicals here, Valet Pro have ensured it's all natural. Although we don't think it's totally necessary to be 100% natural for a car wax, it's a nice touch.

It goes on easily to clean paintwork and buffs off even easier. What's left is a shine you'd expect from a top-end wax. When the sun hit our newly waxed bonnet it was hard to deny it left a finish probably on par with much more expensive products.

It really works a treat, and throwing some water on proved it did bead

marvellously. We have to say it's not the cheapest wax on the market, but it doesn't smear and it works really nicely.

Lastly, it smells great. Honestly, take a whiff and you'll want a scoop. Obviously we recommend you keep this one just for the car, although there's no stopping you using it in your hair, perhaps it'll keep the rain off?



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"Works great and smells even better"

PERFORMANCEFORD RATING



GET YER GAS-KIT OFF

Another product in the CarPlan range of Carry On Garage Consumables, this is a gasket remover. I found cause to use it recently while changing a water pump on a friend's small-block Chevy – the gaskets between the water pump and the block were baked solid, and I could either try to chip them off with a screwdriver and risk gouging the block, or I could rely on this stuff. I gave this stuff a go.

The instructions tell you to spray it on, and leave it until you see the gasket bubbling. It didn't say whether you gave it a light dusting or an absolute soaking, but underneath the directions it mentioned that this stuff also serves as a handy paintstripper, so I thought I'd better be gentle with it. It also didn't say how long this might take. I waited a minute or two, no bubbling. I went and found something else to do for five or 10 minutes, returned, no bubbling. Sod it, I thought, and went and found a Stanley blade for the scraping.

Well, roger me with the ragman's trumpet if those gaskets didn't just peel off that block with the barest minimum of Stanley-based persuasion. I reckon they'd have come off in one piece, too, if I'd had

longer arms! So it looks like it does exactly what it says on the tin, and saved me a lot of scraping. The only issue I can see is its ability to strip paint from anything nearby, and the aerosol nozzle is hardly the model of precision. So if you're looking to shift stubborn gaskets off your old smoker, this is the stuff; if you've a stuck gasket on your prize-winning show motor, you're probably best with a gentle scraper.



Cost: £12.00

Contact: www.carplan.co.uk

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VELCRO HEAVY DUTY TAPE

When searching for solutions for the car or the garage you can come across all sorts of bizarre products whilst perusing places like Halfords. We came across this Velcro tape when looking for a solution to a faulty sat nav holder.

With sat navs, you're restricted to securing them to a window anyway, so we figured this might be a nice alternative to those lacking window space, or suffering from the same problem. In the pack you get one roll of 'fluffy' Velcro and another of 'spiky'. You simply cut the appropriate shape out of both tapes and apply.

This gave us plenty of options when securing the sat nav. However, the tape didn't want to stick to our test car's interior, probably as it wasn't very smooth. This wasn't helped by the fact the Velcro is so strong, it would pull the tape away from the dash. Perhaps too strong for its own good!

After a bit of experimentation it stuck. Overall we feel this a pretty nifty product with a wealth of applications - we've heard that it's even capable of securing tools to garage walls. Well worth keeping in your toolbox.

Cost: £7.99

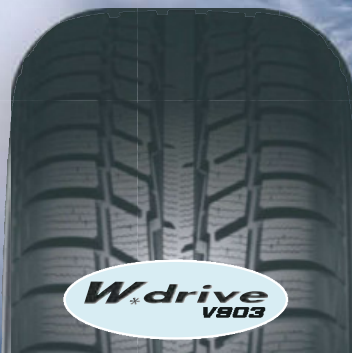
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STEPHEN HARPER

As heroes within the Ford world go, you'd have to work hard to better this one. He's Stephen Harper, you know, the bloke who designed the legendary Escort RS Cosworth.



CHRIS POLLITT



VARIOUS

Down in Devon there's an office, and in that office there are various clues to Stephen's history. Physical renders of prototype cars, sketches aplenty, magazine cuttings about cars that he's penned... However, there is one sketch that shines above all the others, and that's of a red Escort. It looks familiar, but different. It looks like a Cosworth, but it has other features too. That's because it was the starting point for what would become one of the greatest Fords of all time, a sketch to show what the RS Cosworth could be. It was the starting point for the Escort RS Cosworth, and it marks the beginning of the journey for Stephen in terms of him designing it. Clever bloke, really. We still can't colour within the lines...



BEFORE WE GET TO THE ESCORT, TELL US ABOUT YOUR JOURNEY INTO CAR DESIGN.

I started off as a third generation carmaker, care of family who had worked at Longbridge. When it was my time, I started as an apprentice engineer; this was very much on the physical end of the scale – building and making things. However, I had taught myself to draw based on sketches I'd seen, and as fate would have it, that hobby would steer me in a different direction.

Harris Mann, the chief designer at the time, saw some of my drawings and after having a meeting, I managed to get an internship in the design studio. Of course, I had to finish off my engineering apprenticeship, but after that it was into the design studio. Basically, they recognised that I could be both a designer and an engineer, so once the engineering apprenticeship was finished, I went to the Royal College of Art in London and as a result, by the time I was 21, I was a car designer!

WHAT OTHER CARS HAVE YOU PENNED OR BEEN A PART OF?

Ha! Far too many to list, more than likely. I've worked on Volvos, Fords, Bentleys, Triumph motorcycles, Nissans and lots more – I just enjoy the variety that comes from work like this, every challenge is something new. Sometimes it's a full car, sometimes it's one element, sometimes it's a new package that can be used to re-style a car or make it look sportier.

WHAT'S IT LIKE TO SEE SOMETHING YOU DESIGNED DRIVE PAST YOU ON THE STREET?

It's an amazing feeling, there's nothing quite like it. One of the very first cars I saw in the metal after being part of its creation was the Mini Metro. My Dad actually bought one, which, at first, was deeply embarrassing! But then, after I got used to the idea of it being on the driveway, it was really great.

However, there are two sides to my job. It's brilliant to drive down the street, looking at other cars, thinking to myself "I did that, I did that, I worked on that, I designed that, etc". But then, one day, you'll see one in a scrapyard and frankly, it's devastating. It's just tin-can fodder by that point, but it's something I labored over, something with details that took a massive amount of effort, but now they're nothing more than scrap. That always hurts.

Still, the bonus is that for every ten cars designed, one has a following. Cars like the MGF for example, or, of course,

the RS Cosworth. These cars are surviving and, especially in the case of the latter, becoming coveted classics. It's quite an amazing feeling to know something you designed is now a sought-after motor.

WHERE DID YOUR INVOLVEMENT WITH FORD BEGIN?

Well, turning up to the Longbridge offices – which were, of course, full of 'home grown' metal – in a Caspian Blue XR3 probably kick-started my departure!

In reality I'd been away from Austin/MG for a while. It was in 1987 when I was the Chief Designer for MGA Developments Ltd that I was approached to help Ford with the design of a new Escort Van. After that I was tasked with penning what would become the Galaxy/Sharan and, of course, this led on to the Escort RS.

However, before all of this I had worked on a mass of other vehicles, so my abilities and my reputation as a designer had grown considerably, so it was a pleasure to be approached by a concern as big as Ford.

DID YOU HAVE ANY IDEA HOW IMPORTANT THE ESCORT RS COSWORTH WAS?

Ford Motorsport was a major influence for me through the years, as was motorsport in general, especially having worked on the likes of TR7 rally cars when I was still at Longbridge.

To be involved with the Escort RS Cosworth was a wonderful opportunity. It had heritage and, as such, I really felt I was taking part in something really special. It made me feel proud. But, of course, it's also my job, so it was also a project that, despite the thrill of being a part of, I one day had to finish in readiness for the next one!

WHAT WERE THE MOST CHALLENGING ASPECTS?

Getting the aerodynamics right was a huge challenge, that and the need to do it to a cost. It was so finite in terms of budget, literally down to 25c costings – there was no flex in the budget at all. However, it was a competition car first and foremost, so it had to be right – it was a hell of a juggling act trying to achieve that whilst keeping the accountants happy. Basically, it was all to do with the little details and trying to do it to time and to budget.

WERE THERE ANY ELEMENTS THAT YOU REALLY WANTED, BUT NEVER SAW FINAL DESIGN?

One of the engineers and myself were talking and we agreed

that some sort of flexible front splitter or spoiler, something that would change shape and airflow at speed, would be a huge boon to a competition vehicle. It would mean the air would be going where it was most needed depending on the rate of airflow. Needless to say though, the money men weren't thrilled with the cost implications. Funnily enough, the same thing can now be found on a Ferrari 458, so we were onto something!

WHAT DO YOU THINK OF THE CURRENT RANGE OF PERFORMANCE FORDS?

I loved the RS Focuses, but I can't get my head around a five-door performance car, so the newest version is a little lost on me. The best cars have always been nutters, and being a nutter is not something associated with a four-door Ford in my eyes! It's okay for the ST, as they're appealing to a different market, but for an RS, no way! And that includes the Sapphire in my eyes (don't address the hate mail to us, Ed).

Four doors are for the sensible cars like the BMWs and Mercs. The new RS has a great front end, but it's just a typical hatchback in the middle, it's trying to be too many things. When I saw recent suggestions and images of a new Capri it was exciting because it could be a chance to have a proper, bonkers car, something that harks back to RS3100 or the like, a no nonsense performer. You have to compromise comfort for out and out ballsiness, you don't try and shoehorn in practicalities. Imagine a four-door Escort RS Cosworth... no way!

WHAT ARE YOU WORKING ON NOW?

The EV (electric vehicle) that my company, SHADO, has recently unveiled has been the biggest project by far. That, along with other forms of urban transport with low energy implications is important to me, mainly because the more of them there are, the less petrol is being used. The less petrol being used on the commute, the more there is left for proper cars!

I've also been working on some sport van concepts, things along the lines of the sport VWs and Transits you see today. Then, most recently, I've been creating a military jeep in Thailand that's inspired by Iron Man of all things!

CAN YOU DESIGN US A COSWORTH MONDEO PLEASE, FOR OUR ED?

It's got four doors. Give me a call when the Capri is out. ☺



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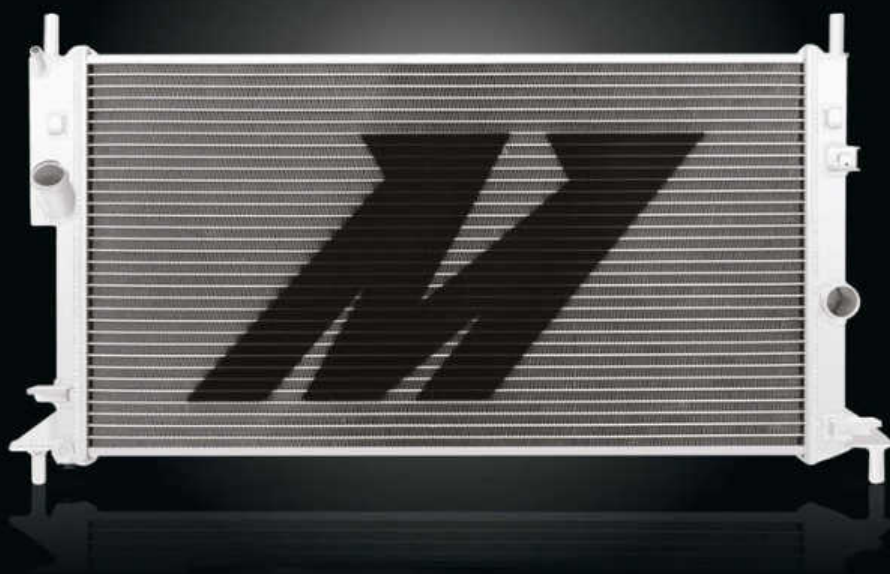
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